(18,499.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1902.

No. 307.

WILLIAM R. WARNER, JR., EXECUTOR OF THE ESTATE OF WILLIAM R. WARNER, DECEASED, APPELLANT,

vs.

THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, FRANK S. HERETH, AND O. T. EASTMAN.

APPEAL FROM THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SEVENTH CIRCUIT.

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a *Transcript of Record.*

In the United States Circuit Court of Appeals for the Seventh Circuit, October Term, A. D. 1900.

THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman, Appellants, *vs.* WILLIAM R. WARNER, Appellee. } No. 766.

Mr. Philip C. Dyrenforth, counsel for appellants.
Mr. Frank T. Brown, Mr. Samuel E. Darby, counsel for appellee.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Transcript of record filed January 31, 1901.
Printed record filed Mar. 20, 1901.
EDWARD M. HOLLOWAY, *Clerk.*

1 Circuit Court of the United States for the Seventh Circuit, Northern District of Illinois.

WILLIAM R. WARNER *vs.* THE SEARLE & HERETH COMPANY, GIDEON D. Searle, Frank S. Hereth, and O. T. Eastman. } In Chancery.

Bill of Complaint.

To the honorable judges of the circuit court of the United States for the seventh circuit in and for the northern district of Illinois:

William R. Warner, a citizen of the United States, residing in the city of Philadelphia and State of Pennsylvania, and an inhabitant of said city and State, and doing business under the name and style of Wm. R. Warner & Co., and having his principal place of business in said city and State, and also branch places of business in Chicago and elsewhere in the United States, brings this his bill of complaint against the Searle & Hereth Company, a corporation organized under and by virtue of the laws of the State of Illinois, United States of America, and having its principal place of business in Chicago and State of Illinois, and being an inhabitant of said city and State, in the northern district of Illinois; and also against Gideon D. Searle, Frank S. Hereth and O. T. Eastman, individually and in their official capacity as officers of such corporation, all three of these persons being citizens of the United States and residents of the city of Chicago and State of Illinois, and inhabitants of the
2 northern district of Illinois, and having their principal place of business in the city of Chicago and State of Illinois.

1. And thereupon your orator complains that heretofore and prior to November 18, 1898, he was the sole and exclusive owner and proprietor of, and had used in his business in Philadelphia and in commerce between the United States and foreign countries, and particularly with New South Wales and Victoria, a certain arbitrary and fanciful mark, termed PANCREOPEPSINE, upon bottles and packages containing a certain medicinal preparation, and had printed such mark on the bottles or packages upon the outside thereof and upon wrappers surrounding such bottles or packages; and had sold large quantities of the medicinal preparation put up in such packages or bottles, so marked and designated, throughout the United States and in commerce with foreign countries, and particularly in the cities of Philadelphia and Chicago, and has continued to sell large quantities of such goods in packages or bottles marked, and has never abandoned such mark; and the public generally has come to recognize packages and bottles provided with such mark as containing the high-class medicinal preparation intended to cure indigestion and the like, manufactured by your orator, and to recognize your orator as the proprietor of such mark, and such general public has been accustomed to purchase large quantities of such goods so marked and designated and manufactured by your orator, whereby your orator has built up a large and growing trade in such medicinal preparation, to his great benefit and advantage.

2. And your orator further shows unto your honors that being, as aforesaid, the original and sole proprietor of the trade-mark before mentioned, and having on the 18th of November, 1882, filed in the United States Patent Office a statement specifying the name,
3 domicile, location and citizenship of your orator, the class of merchandise or medicinal preparation, and the particular goods comprised in such class to which the particular trade-mark has been appropriated, a description of the trade-mark itself with *fac-similes* thereof, and a statement of the mode in which the same is applied and affixed to the medicinal preparation, and the length of time during which the trade-mark has been used; and there accompanied such statement a written declaration, verified by the said William R. Warner, to the effect that he had at the time a right to the use of the trade-mark sought to be registered, and that no other person, firm or corporation had a right to such use, either in the identical form or in any such near resemblance thereto as might be calculated to deceive; that such trade-mark was used in commerce with foreign nations and Indian tribes, and especially in commerce with New South Wales and Victoria; and that the description and *fac-similes* presented for registration truly represented the trade-mark sought to be registered, and in all respects complied with the conditions and requirements of the acts of Congress and rules and requirements of the Commissioner of Patents governing the registry of trade-marks; and that thereupon the said statements made by your orator were duly recorded by the Commissioner of Patents; and a certificate of registry of the trade-mark was issued to your orator, in the name of the United States of America, under the seal of the Department of the Interior, and signed by the Commissioner

of Patents, and a record thereof, together with the printed copies of the specifications, was kept in the Patent Office in books provided for that purpose, and that the statement and declaration of trade-mark accompanying such certificate was No. 9,911, and was registered December 26, 1882; whereby there was recorded and
4 registered *prima facie* evidence of ownership by your orator of such trade-mark, as by such certificate of registration, or duly certified copy thereof, in court to be produced, will more fully appear, a Patent Office copy of the same being hereto attached and marked "Exhibit A," and a sample of the bottle so marked and designated as indicated in the first paragraph hereof being attached and marked "Exhibit B."

3. And your orator further shows unto your honors that the arbitrary and fanciful symbol, mark or word PANCREOPEPSINE was placed, as before stated, on the labels of bottles or upon the packages surrounding the same by your orator, and such packages or bottles with such mark thereon were sold and distributed by your orator to the public generally, and particularly to the public in the cities of Philadelphia and Chicago, whereby the public associated such goods so manufactured by your orator with the symbol, mark or name above mentioned, and were thereby educated to recognize the medicinal preparation by the name or mark given it by your orator, as aforesaid.

4. And your orator further shows unto your honors that the symbol, mark, name or word before mentioned and described is not and has not been used in any unlawful business, or upon any article injurious in itself, by your orator, nor has it been used as a design for deceiving the public in the purchase of merchandise or medicinal preparations, nor under any certificate of registry fraudulently obtained; and avers that your orator is the sole owner and proprietor of such trade-mark, and sells it and delivers it, as before mentioned, under the name under which your orator is doing business, viz., Wm. R. Warner & Co.

5. And your orator further shows unto your honors that the trade-mark, symbol or word set forth and described in said state-
5 ment and declaration No. 9,911 was and now is his sole and exclusive property; and that it is of great utility and value in his business, and that the trading public have generally acquiesced in the validity of said trade-mark and recognized the rights of your orator in and under the same, and associated the medicinal preparation which accompanies such trade-mark or symbol with the said mark or symbol and as the preparation manufactured by your orator; and your orator has received great profit by the sale of the preparation known and designated by such symbol or word, and if your orator can receive legal protection against infringers great additional profit will accrue to your orator from the employment of such mark or symbol.

6. And your orator further avers and shows unto your honors that the defendant, The Searle & Hereth Company, and the individual defendants, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, well knowing the premises and the rights and privileges

belonging to and secured by your orator, and the business built up in connection with such medicinal preparation and associated with the trade-mark or symbol mentioned aforesaid, and conspiring and contriving together to injure your orator and to deprive him of the profits, benefits and advantages which might and otherwise would accrue to him from the sole and exclusive ownership and use of such trade-mark or symbol, have before the commencement of this suit, without the license and authority and against the will of your orator, and in violation of your orator's rights and privileges, counterfeited, copied and colorably imitated the trade-mark registered as belonging to your orator, and the mark or symbol specified as used by your orator, and have affixed such mark or symbol to a medicinal preparation of the same general nature as that manufactured by your orator; and have counterfeited and colorably imitated the
6 manner of placing such mark or symbol upon the bottles containing such preparation, and upon the wrappers surrounding such bottles, and have in this manner and otherwise so closely imitated said mark or symbol used by your orator in connection with his preparation that the public has been misled and deceived into believing that the goods of defendants are the goods of your orator; and that the said defendants, together and individually, have sold in the northern district of Illinois, and elsewhere, large quantities of the medicinal preparation intended for the cure of indigestion similar to that manufactured by your orator and contained in packages or bottles marked with the trade-mark or symbol heretofore referred to as belonging solely to your orator, or in such close imitation of your orator's trade-mark or symbol as has deceived the public and led such public to believe the said mark or symbol designated the goods manufactured by your orator; and have thereby subtracted large profits from your orator's business and lessened your orator's sales in the goods put up and marked as indicated; and that the defendants have been notified to desist from continuing to use such mark or symbol in connection with such goods, but nevertheless, in defiance of your orator's rights and privileges, they have continued to use such mark or symbol, or a close imitation thereof, in connection with similar goods manufactured by said defendants, and they are still manufacturing goods put up in bottles and packages similar to those used by your orator and having thereon labels containing the mark or symbol owned by your orator.

7. And your orator further shows unto your honors that the defendants are manufacturing and conspiring together to manufacture a medicinal preparation similar to that manufactured by your orator, and are putting up the same in bottles and packages
7 marked with the trade-mark or symbol used by your orator in a similar relation, or in such close imitation thereof as to deceive the public; and are placing such spurious preparations in bottles or packages so marked and stamped with said symbol or trade-mark, and are selling the same in large quantities and at a lower price than your orator is selling the genuine article, and at a lower price than affords a fair and reasonable profit; and by this imitation of your orator's symbol and trade-mark the defend-

ants are procuring the custom and trade of persons who would otherwise buy of your orator such genuine goods, and are inducing the public to believe that such goods were in fact manufactured by your orator, and are thereby causing much damage to your orator's trade and business and causing your orator irreparable injury, and unless the said imitation of your orator's trade-mark and symbol is discontinued or prevented, it will in the future, as it has in the past, occasion unfair competition in trade and will ultimately irretrievably damage and probably destroy the reputation which your orator has built up in association with the mark or symbol applied to this class of goods.

And your orator further shows unto your honors that the mark or symbol has by long usage and at great expense in advertising, introducing and selling by your orator, become associated with the medicinal preparation to which it has been applied by your orator, so that the public in general, and particularly the citizens of the northern district of Illinois, identify the article by the name, mark or symbol; and that the spurious article manufactured and sold by the defendants associated with the same mark or symbol, or a mark or symbol in close imitation thereof, is a fraud and deception upon such of the citizens of the northern district of Illinois, and elsewhere, as purchase the same, believing it to be the genuine article manufactured by your orator, and thereby the public generally,
8 and particularly the citizens of the northern district of Illinois, are damaged and misled.

8. And your orator further shows unto your honors that he has duly notified defendants of his ownership of the mark or symbol before mentioned, and of his use of the same in connection with the preparation for a long series of years, and of his registration in the Patent Office of his trade-mark, and has requested them to desist from their infringement of the same by marking their goods of the close imitation thereof; but said defendants still openly and defiantly continue to manufacture and sell such goods so marked, although thus warned by your orator to desist therefrom and well knowing your orator's rights thereunder; and your orator avers that said defendants have enjoyed and received, and are still enjoying and receiving, great gains, profits and advantages from the fraudulent and unlawful use of the colorable imitation of your orator's trade-mark or symbol and from the unfair competition in trade which said defendants are pursuing, which profits would otherwise have been obtained by your orator and to which your orator is entitled; but how much thereof your orator does not know, and prays discovery thereof; and your orator further prays that said defendants may be compelled by decree of this court to account for and pay over to your orator all such gains and profits as have accrued or arisen to or been earned or received by said defendants from the unlawful use of the colorable imitation of your orator's trade-mark in the manner specified, and the unfair competition in trade pursued by such defendants, and in addition to be required to pay the damages sustained by your orator for this wilful violation of his trade-mark and his rights and privileges.

9. Forasmuch as your orator can have no adequate re-
9 lief except in this court, and as said proceedings by said defendants are contrary to equity, to the end, therefore, that defendants may show, if they can, why your orator should not have the relief prayed, and make without oath (an answer under oath being hereby expressly waived) to the best and utmost of their knowledge, remembrance, information and belief, full, true, direct and perfect answer to all and singly of the matters and things hereinbefore stated and charged, as fully and particularly as if severally and separately interrogated as to each and every of such matters, and as if the same were hereinafter repeated.

And your orator prays that the said defendants, collectively and individually, their servants, agents, attorneys and workmen, and each and every of them, may be perpetually enjoined and restrained by an injunction issuing out of and under the seal of this honorable court from directly or indirectly using or vending to others to be used packages or bottles, or other articles containing a medicinal preparation and having marked, blown in, printed, or otherwise affixed thereon the trade-mark set forth in the certificate of registration and declaration issued out of the United States Patent Office as No. 9,911, or any part thereof, or any colorable imitation thereof, or the mark or symbol which your orator has acquired the sole right to employ by prior and long use, which mark or symbol he has hereinbefore designated and has become the same as that which is indicated in the certificate of registration before mentioned; and that your orator's trade-mark may be decreed to be valid and your orator the lawful owner of the same, and the manufacture, sale and use of the mark or symbol by the defendants an infringement; and that the defendants may be decreed to pay the cost of this suit, and that your orator may have such further relief as to this honorable court may seem meet and as shall be agreeable to equity.

10 And your orator further prays that a preliminary injunction may be issued out — and under the seal of this honorable court, enjoining and restraining said defendants, their servants, agents, attorneys and workmen, and each and every of them, from further infringement of such trade-mark of your orator during the pendency of this suit.

May it please your honors to grant unto the orator, not only a writ of injunction conformable to the prayers of this bill, but also the writ of *subpœna ad respondendum* issuing out of and under the seal of this honorable court directed to the said defendants, The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, commanding them, and each of them, at a certain time to be therein named, and under a certain penalty to be therein stated, to be and appear before this honorable court, then and there to answer unto this bill of complaint, and to conform and abide by such order and decree in the premises as to this honorable court shall seem meet and may be required by the principles of equity and good conscience.

And your orator will ever pray, etc.

WILLIAM R. WARNER,
Doing Business under the Name and Style of Wm. R. Warner & Co.

BROWN & DARBY,
Solicitors for Complainant.

11 UNITED STATES OF AMERICA, }
Eastern District of Pennsylvania, } *ss:*

At Philadelphia, in said district.

Personally appeared before me the said William R. Warner, the complainant above named, who, being duly sworn, deposes and says that he has read the foregoing bill of complaint and that the same is true, of his own knowledge, except as to matters stated on information and belief, and as — those matters he believes the same to be true; and that he believes himself to be the sole owner and proprietor of the trade-mark set forth in the within bill of complaint and in the certificate of registration No. 9,911, registered December 26, 1882.

WILLIAM R. WARNER.

Subscribed and sworn to at Philadelphia this — day of February, 1898, before me.

[SEAL.]

——— ———,
Notary Public.

12 Circuit Court of the United States, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman. } In Equity.

Answer.

The answer of The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth, and O. T. Eastman, defendants, to the bill of complaint of William R. Warner, complainant, in chancery exhibited.

To the honorable the judges of the circuit court of the United States for the northern district of Illinois:

These defendants, now and at all times hereafter saving and reserving to themselves all and all manner of benefit of advantage or exception that can or may be had to the many errors, uncertainties and imperfections in the said bill of complaint contained, for answer thereto, or to so much thereof as they are advised it is material or necessary for them to make answer unto, answering say:

1. They have no knowledge, save from the said bill of complaint, that the firm of William R. Warner & Company of Philadelphia, Pennsylvania, consists of the complainant, William R. Warner, alone, and that therefore the said William R. Warner is the sole proprietor of the alleged trade-mark rights and privileges referred to in said bill, and is entitled to bring suit thereon in his own name as sole complainant, but leave the said complainant to make such proof thereof as he may deem necessary.

2. They admit that The Searle & Hereth Company, defendant, is a corporation organized under and by virtue of the laws of
13 the State of Illinois, that it has its principal place of business in Chicago in said State; that Gideon D. Searle, Frank S. Hereth and O. T. Eastman, the separate defendants, are officers of said corporation, and that all of said defendants are inhabitants of the northern district of Illinois, as alleged in the bill of complaint.

3. They are informed and believe it to be true that on the 26th day of December, 1882, the complainant, William R. Warner, obtained from the United States Patent Office a certificate of registration, No. 9,911, for an alleged trade-mark to be applied to a medicinal preparation, the same being the word "Pancreopepsine;" but they have no knowledge, save from the said bill of complaint, as to the length of time for which the said William R. Warner had previously used the said designation, or whether he had, in fact, previously used the same, or whether he had previously employed the said designation in connection with a medicinal preparation in commerce with foreign nations or Indian tribes, and particularly with New South Wales and Victoria, but leave the said complain-t to make such proof thereof as he may deem necessary.

4. They deny, on information and belief, that the word "Pancreopepsine" is a proper subject for registration as a trade-mark under the laws of the United States, said word being, if not deceptive, plainly descriptive of the ingredients of the medicinal preparation to which it is applied; and that therefore said certificate of registration is void.

5. They are informed and believe it to be true that heretofore the said complainant has employed the word "Pancreopepsine" on the labels of bottles and upon packages surrounding the same as the designation of a medicinal compound, though to what extent or for what length of time they have no knowledge save from the said bill of complaint; but they deny that the said word is in the
14 nature of an arbitrary or fanciful symbol or mark, such as the law will protect as a trade-mark, and charge that if not deceptive it is purely descriptive, being a mere compound of the ordinary names of the ingredients, or the principal ingredients, contained in the medicinal compound, with the name of one slightly modified, and they deny, on information and belief, that the public have associated the said name with the goods manufactured by the complainant.

6. They have no knowledge, save from the said bill of complainant, as to the nature of the compound to which the complainant applies the designation "Pancreopepsine," as to whether or not the

said compound contains, as the only or principal ingredients, the substances implied by the term "Pancreopepsine," nor as to whether the said compound is injurious or not, or beneficial or not as a medicine, but leave the said complainant to make such proof thereof as he may deem necessary.

7. The- deny, on information and belief, that the trading public have generally acquiesced in the validity of the said alleged trade-mark, and recognized the rights of the complainant in and under the same, but they charge, on the contrary, on information and belief, that for many years other manufacturers in the United States have openly and notoriously placed upon the market medicinal compounds containing as their principal ingredients the substances pancreatin and pepsin, and have designated the same by a compound word which proclaims the presence of those substances as ingredients.

8. These defendants, further answering, say that they are engaged in business in the city of Chicago as general manufacturing chemists; that among other things they put upon the market a medicinal compound having special merit as an aid to digestion, consisting, aside from the diluent, of nearly forty per cent. of pure pancreatin, about fifty per cent. of pure pepsin, and a few other ingredients in relatively small proportions; that pancreatin and pepsin are well-known medicinal agents of recognized efficacy in promoting digestion, and have been mixed together for medicinal purposes for nearly or quite thirty years past; that they have designated their compound upon the labels of their bottles and packages "Pancro-Pepsin," in order that the nature of the compound may be expressed and its purpose as a digestive implied by the name; that they have put the said preparation in bottles and sold it upon the market both as a powder and in liquid form, the latter being designated "Elixir Pancro-Pepsin;" that the term "Pancro-Pepsin" is philologically a correct verbal compound; that in adopting it they have only followed a usage in the matter of word-building which has been common with manufacturing chemists for a great many years where it has been desired that the name shall be generally descriptive of the compound to which it is applied; and that the compound which they put upon the market under the designation "Pancro-Pepsin" cannot be more appropriately designated than by means of that name.

9. They deny that they have in any manner or way whatsoever copied or colorably imitated the alleged trade-mark of the complainant, registered as aforesaid, and said to have been employed by him in trade in the United States and elsewhere, the name employed by these defendants being distinctively different from that employed by the complainant and not likely to be mistaken for it by the public.

10. They deny that they have at any time misled the public or any member thereof into supposing that the pancro-pepsin manufactured and sold by them was of the complainant's manufacture, or

16 that any person could have been so misled from the labels which they have employed, since each of said labels has conspicuously upon it at the foot the name of the Searle & Hereth Company as the manufacturers.

11. They have no knowledge, save from the bill of complaint, as to any expenditures of time and money by the complainant for the purpose of advertising and introducing his medical compound "Pancreopepsine," but they submit that even if it is true that the said complainant has so expended large sums of money and much time and labor, this fact is immaterial since the name "Pancreopepsine" is not the subject of a lawful trade-mark, and even if it were the subject of a lawful trade-mark it has not been infringed by these defendants.

12. And these defendants, further answering, deny all combination and conspiracy with which they are by the said bill of complaint charged; without this, that there is any other matter, cause or thing in the said bill of complaint contained not herein and hereby well and sufficiently answered, confessed, traversed and avoided or denied, is true to the knowledge and belief of these defendants; all which matters and things these defendants are ready and willing to aver, maintain and prove as this honorable court shall direct and humbly pray to be hence dismissed with their reasonable costs and charges in this behalf most wrongfully sustained.

THE SEARLE & HERETH COMPANY,
GIDEON D. SEARLE,
FRANK S. HERETH,
O. T. EASTMAN,
By DYRENFORTH & DYRENFORTH,
Solicitors for Defendants.

DYRENFORTH & DYRENFORTH,
Solicitors for Defendants.

17 *Replication.*

Circuit Court of the United States for the Seventh Circuit, Northern District of Illinois.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY, GIDEON D. Searle, Frank S. Hereth, and O. T. Eastman. } In Chancery.

Replication of William R. Warner.

This repliant, saving and reserving unto himself, now and at all times hereafter, all and all manner of benefit and advantage of exception which may be had or taken to the manifold insufficienc-es of the said answer, for replication thereunto, says: That he will aver, maintain and prove his said bill of complaint to be true, certain and sufficient in the law to be answered unto, and that the said

answer of the said defendants is uncertain, untrue and insufficient to be replied unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto, and not herein and hereby well and sufficiently replied unto, confessed or avoided, traversed or denied, is true.

All of which matters and things this repliant is and will be ready to aver, maintain and prove as this honorable court shall direct, and humbly prays as in and by said bill he has already prayed.

BROWN & DARBY,
Solicitors for Complainant.

18 *Complainant's Prima Facie Evidence.*

Circuit Court of the United States for the Seventh Circuit, Northern District of Illinois.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY, GIDEON D. Searle, Frank S. Hereth, and O. T. Eastman. } In Chancery.

Taking of testimony in behalf of complainant, commenced this 11th day of June, 1898, at 10 a. m., at the office of Brown & Darby, 1124 Monadnock block, Chicago, before Edwin C. Semple, notary public, acting as special examiner by consent.

Present: Frank T. Brown, Esq., in behalf of complainant; Philip C. Dyrenforth, Esq., in behalf of defendants; notary public and the witness named below.

ANDREW J. BENSON, being duly sworn, testifies, in answer to interrogatories propounded to him, as follows:

Q. 1. What is your name, age, residence and occupation?

A. My name is Andrew J. Benson; age, forty-three; occupation, druggist; residence, Chicago, Ill

Q. 2. What is the location of your drug store?

A. 2401 Indiana avenue.

Q. 3. I hand you a prescription, and ask you to state whether or not you ever filled it.

A. Yes.

Q. 4. When did you fill it?

A. On the 7th day of February, 1898.

Q. 5. In whose possession has the prescription been from the time you filled it until today?

A. In mine.

19 Q. 6. From whom did you purchase a medicine with which you filled the prescription?

A. From either the Searle & Hereth Company or Robert Stephenson & Co.

Q. 7. Who is the manufacturer of the medicine which you used in filling the prescription?

A. The Searle & Hereth Company.

Q. 8. Do Robert Stephenson & Co. handle Searle & Hereth's goods or not?

A. They do; they are wholesale druggists.

Q. 9. What trade-mark or label was upon the bottle of medicine from which you filled the prescription?

A. The name was "Liquid Pancro-Pepsin."

Q. 10. What is the name, label or trade-mark given the medicine in the prescription?

A. Liq. (abbreviation for liquid, I suppose) Pancreopepsine.

Q. 11. I hand you a bottle of liquid containing the label or trade-mark "Liquid Pancro-Pepsin," and ask if this was the same label as was upon the bottle from which you filled the prescription?

A. Yes; I think so.

The prescription referred to by the witness in the preceding testimony is offered in evidence and marked "Doctor Bate's William R. Warner Prescription."

By Mr. DYRENFORTH: The exhibit and all the testimony concerning it are objected to as incompetent, immaterial and irrelevant.

The notary marks the prescription as an exhibit as above named.

It is stipulated by and between counsel that the bottle containing the label or trade-mark "Liquid Pancro-Pepsin," referred to by the witness, was sold by the Searle & Hereth Company. This stipulation is made upon the best present knowledge of defendant's counsel as to the particular label referred to, and he reserves the right of correction in case he ascertains hereafter that his understanding is erroneous.

EDWIN C. SEMPLE,
Notary Public.

Counsel for complainant offers in evidence the bottle above referred to, and marks the same "Complainant's Exhibit Defendants' Trade-mark."

Cross-examination by Mr. DYRENFORTH:

X Q. 1. Did you ever know of a medicinal compound prepared by William R. Warner & Co., of Philadelphia, called "Pancreopepsine"?

Objected to as not cross-examination.

A. I had never heard of it at that time.

X Q. 2. How long have you been a druggist?

A. Twenty years or more.

X Q. 3. During all that time have you been a druggist in the city of Chicago?

A. No; only about six years previous to filling this prescription.

X Q. 4. Where were you engaged in the same business before you came to Chicago?

A. At Marion, Ill.

X Q. 5. Were you engaged in that business in Marion continuously for about fourteen years before you came to Chicago?

A. Yes.

X Q. 6. In what way did you become qualified to be a pharmacist?

A. I studied pharmacy under the tutorship of Dr. Elliot Spenser, and I was in business at the time the pharmacy law of this State was passed, and have been continuously registered annually since.

21 X Q. 7. Then I understand from this that you are not a graduate of any college of pharmacy; is that correct?

A. Yes.

X Q. 8. I suppose, however, that you have carefully studied your profession, and consider yourself a thoroughly competent pharmacist. Is that correct?

A. I do.

X Q. 9. What is "pancreatin"?

Objected to as not cross-examination, this witness being called upon a question — fact purely.

A. I suppose you mean pancreatin such as is found in the market. It is an extract from the juices of the lining of the stomach or bowel of the hog or cattle.

X Q. 10. What is "pepsin"?

A. Well, it is an extract derived from the lining of the stomach of the hog or cattle.

X Q. 11. Do you know for what general purpose "pancreatin" and "pepsin" are used in medicine?

A. Pepsin is used as an aid for digesting starchy and albuminous food; and pancreatin for digesting the fats and oils.

X Q. 12. This being true, would a compound containing both pancreatin and pepsin be in the nature, theoretically, of a general digestive?

Objected to as not cross-examination, because this witness was only called on a question of fact, and the question is a fishing excursion.

A. Yes, but there are other organs of digestion besides the stomach and bowels.

X Q. 13. When you filled Dr. Bate's prescription, did you give any thought to the general purpose for which the compound called for was probably intended?

Same objection.

22 A. Yes, I thought it was to be used for an aid to digestion.

X Q. 14. Why so?

Same objection.

A. Because I supposed from the name that the prescription contained pancreatin and pepsin, which are used for that purpose.

X Q. 15. At the time you filled Dr. Bate's prescription, did you

have liquid Pancro-Pepsin of the Searle & Hereth Company in stock?

A. Yes.

X Q. 16. Did you know from the name the general purpose for which it was used in medicine?

Objected to as not cross-examination.

A. I supposed it was used as an aid to digestion.

X Q. 17. What ingredients did you understand from the name that it contained?

Same objection, and as irrelevant, the name having become associated with the goods.

A. I supposed that it contained pancreatin and pepsin.

Redirect examination by Mr. BROWN:

R. D. Q. 1. Previous to filling Dr. Bate's prescription, had you sold Pancro-Pepsin as a digestive agent?

A. We are not supposed to know—we sell those only under the prescription of a physician, and druggists usually know what medicines are generally used for, but what the physician expects in each particular case that he prescribes for the druggist is not expected to know.

R. D. Q. 2. Previous to filling Dr. Bate's prescription, had you furnished Searle & Hereth's Liquid Pancro-Pepsin to other persons?

A. Yes. Such preparations are usually sold only on the prescription of a physician.

23 R. D. Q. 3. Previous to filling such prescription, had you become familiar with the ingredients, in a general way, contained in liquid Pancro-Pepsin?

A. I would say that these proprietary preparations do not usually give their working formula, and we can only surmise what they contain. The name often indicates.

R. D. Q. 4. In some of the bottles furnished by Searle & Hereth Company of this substance bismuth was named as an ingredient on the label; is not that correct?

Objected to as not defining the substance referred to.

A. Yes, they make a preparation of liquid Pancro-Pepsin and bismuth.

R. D. Q. 5. And in some of the preparations containing pancreatin and pepsin you have seen the label give a definition of the ingredients contained in the medicinal preparation, have you not? I mean preparations furnished by the Searle & Hereth Company.

Objected to as immaterial.

A. Yes; I think they say on the label containing pepsin and pancreatin.

R. D. Q. 6. And you have had a price-list of the Searle & Hereth

Company in your possession prior to the time you filled this prescription, have you not?

Same objection.

A. Yes.

R. D. Q. 7. And you had seen the formula for Pancro-Pepsin as given in such price-list, had you not?

Objected to as immaterial, and, further, as leading. I have refrained from entering objections on the latter ground as long as I consistently could, but this is going too far.

Question withdrawn.

R. D. Q. 8. In the price-list of the Searle & Hereth Co. which you saw prior to filling this prescription, was there or not a formula for the medicine called Pancro-Pepsin?

Same objection.

A. I do not remember, but usually, as I stated before, they do not furnish working formulas for their proprietary preparations. For instance, this label reads "Each fluid ounce represents Pancro-Pepsin 40 grains." Now, there is no such thing recognized in medicine as pancro-pepsin. Pancreatin and pepsin are regular medicinal preparations, but this is a foreign word. The same objection to Warner's preparation also. There is no such recognized medicinal preparation as pancreopepsine. It is a foreign word.

R. D. Q. 9. If in the price-list of the Searle & Hereth Co. the coined word "Pancro-Pepsin" was defined and all of its ingredients stated, you probably noticed the definition thus given, although you may not remember what it is at this time. Is this so or not?

Objected to as leading, and also as incompetent, in view of the witness' previous answers.

A. Well, I would say in answer to this: I have answered it twice. They do not as a rule give working formulas. This price-list of the Searle & Hereth Co. does not contain a working formula.

R. D. Q. 10. Please read from the price-list of the Searle & Hereth Co. which you have in your hand the formula under the coined word "Pancro-Pepsin."

Objected to as immaterial.

A. Pure pancreatin 6 ounces, pure pepsin 8 ounces, vegetable ptyalin 4 drachms, lactic acid 5 fluid drachms, hydrochloric acid 5 fluid drachms, sugar of milk.

R. D. Q. 11. Did the price-list of the Searle & Hereth Co. give a formula of the coined word "Pancro-Pepsin," like the one you just read? I mean the price-list which you had before filling this prescription.

A. Probably it did. I do not remember.

Recross-examination:

R. X Q. 1. Is bromo-caffeine a coined word?

Objected to as not recross-examination, and immater-al.

A. I think so. That question has been in the courts for about ten years.

R. X Q. 2. What does the name bromo-caffeine imply?

Objected to as above, and protest is made against the examination of this witness on such outside matters, he being called on a simple question of fact. As the witness has stated, the courts have had before them the word just referred to, and it is not for this witness to instruct the court on the word bromo-caffeine. It is not involved in this case.

A. It is supposed to be bromide of caffeine.

R. X Q. 3. Is bromo-seltzer a coined word?

Same objections.

A. Yes, it's a trade-mark. That's right.

R. X Q. 4. What does the name suggest or imply?

Same objection.

A. I don't think you could claim that that would suggest anything in medicine definitely.

R. X Q. 5. Why not?

A. Because bromo is not a medical term recognized in pharmacy, and seltzer is an ambiguous term given to water of a complex composition.

R. X Q. 6. Have you not known the term "bromo" to be used as the first part of the names given to various proprietary compounds ever since you have been in the business of a druggist?

Same objections.

26 A. I have known it for a good many years to be used to designate some proprietary preparation, but the United States Pharmacopœia does not recognize proprietary preparations in medicines.

R. X Q. 7. What does the word "bromo" imply in the names of these various proprietary compounds, whether truthfully or not?

Same objection, and also as answered in recross-answer 5.

A. We infer it means bromide.

ANDREW J. BENSON.

Adjourned till 11 o'clock Monday morning.

EDWIN C. SEMPLE,
Notary Public.

CHICAGO, *June* 13, 1898—11 a. m.

Met pursuant to adjournment.
Present as before.

ALBERT DAVID THORBURN, being duly sworn, deposes in answer to interrogatories propounded to him, as follows:

Q. 1. What is your name, age, residence and occupation?
A. Albert D. Thorburn; twenty-five years old; pharmacist; live in Chicago.
Q. 2. How long have you been practicing as a pharmacist?
A. Nine years.
Q. 3. Are you registered as a pharmacist under the State law?
A. Yes.
Q. 4. Did you graduate as a pharmacist, and, if so, at what institution?
A. Chicago College of Pharmacy, in 1894.
27 Q. 5. State some of the pharmacist firms with which you have been connected in a professional capacity?
A. Oscar F. Schmidt & Co., S. D. Walden, Thomas Whitfield & Co.
Q. 6. With what firm are you now connected and in what capacity?
A. Thomas Whitfield & Co., as manager.
Q. 7. Are you acquainted with the medicinal preparation sold by William R. Warner & Co. under the name and trade-mark "Pancreopepsine?"
A. Yes, sir.
Q. 8. Does your firm sell this preparation?
A. Yes.
Q. 9. About how long have you been familiar with this preparation?
A. Four years.
Q. 10. Are you familiar with a medicinal preparation manufactured by Searle & Hereth Co., called "Pancro-Pepsin"?
A. Yes.
Q. 11. Does your firm sell this preparation, and if so, for how long to your knowledge?
A. Ever since I have been connected with them.
Q. 12. How long have you been connected with them?
A. A year and two months.
Q. 13. State whether or not in the experience of your firm there has been any difficulty in distinguishing between the respective trade-marks of the respective firms, as above indicated, on the medicinal preparations stated?
A. There has.
Q. 14. What difficulty has resulted, and what occasioned it?
A. The first difficulty was in placing these preparations on
28 the shelves. The entire stock in the store was rearranged soon after I went there and the clerks repeatedly confused one preparation with the other in sorting and rearranging the stock.

We have had calls from customers for this article, and have had to question them as to which preparation was meant—which was wanted. The names of these preparations are so nearly alike, both in pronunciation and spelling, that we have trouble in distinguishing between them.

Q. 15. Have you any difficulty with doctors who prescribe these two medicines?

A. No; we have had no difficulty.

Cross-examination waived.

ALBERT D. THORBURN.

ANDREW EDWARD REMICK, being duly sworn, testifies in answer to interrogatories propounded to him, as follows:

Q. 1. What is your name, age, residence and occupation?

A. Andrew Edward Remick; age, thirty-six; residence, Chicago; occupation, manager of William R. Warner & Co.'s branch in Chicago.

Q. 2. State your education and experience.

A. I studied sciences in McKendre college, at Lebanon, Illinois; served an apprenticeship as pharmacist under S. B. Wyle in Trenton, Illinois. Was in business for myself as a pharmacist from 1881 until 1888, and for one year was out of active drug business. Then I went onto the road for Wm. R. Warner & Co., of Philadelphia. In September, 1891, I came to Chicago as their representative. And in December, 1892 I opened a Chicago branch for Wm. R. Warner & Co., and since that time have been in their employ as manager of the Chicago branch.

29 Q. 3. Since you have been connected with Wm. R. Warner & Co., have they manufactured and sold any medicinal preparation intended to aid the digestion?

A. Yes.

Q. 4. State what preparation or preparations in this line they have manufactured, and any trade-mark or trade-marks they have used in connection therewith?

A. They have manufactured special formulas in tablets, pills, elixirs, etc., but one special preparation which we manufacture, and have been at great expense in introducing, is a preparation called "Pancreopepsine."

Q. 5. Please state the nature of the efforts of your firm towards introducing Pancreopepsine?

A. First, by sending out our travellers and calling on physicians; leaving them liberal samples or original bottles of this preparation; and trying to induce them to prescribe the same, by advertising this preparation through the drug and medical journals of this and other countries; by sending special literature, from time to time, through different parts of the world to physicians; by exhibiting it and advertising it by giving away special advertising matters and samples to physicians at the various world's fairs in many countries.

Q. 6. If you have a sample of the label which was placed around the package containing this preparation, please produce the same.

A. I have one, and herewith produce it.

Counsel for complainant offers in evidence the above paper, and marks the same "Complainant's Exhibit Trade-marked Wrapper."

EDWIN C. SEMPLE,
Notary Public.

30 Q. 7. As a result of the efforts of your firm, state whether or not it has built up a business in the preparation designated by the trade-mark mentioned, in this city and section of the country?

A. It has.

Q. 8. Name a few of the principal druggists in this city who sell the medicinal preparation made by your firm marked "Pancreopepsine."

A. It has been sold in the past, and sold at present, by nearly every wholesale house in the West, as I have sold it personally myself to jobbers all the way from Detroit to San Francisco. I know it is also sold by many of the retail pharmacists all over the Chicago territory, as we fill orders for it every day, but not calling upon the retail drug trade myself I could not mention particular druggists who have it in stock, but we are filling orders every day on this preparation to many of the retail druggists and jobbers of this territory, but I could not give the particular names without referring to our sales books.

Q. 9. Has your firm met with any competition of late in imitation of your preparation above named, and, if so, what is it?

A. Yes, very marked, indeed, there being an imitation on the market called "Pancro-Pepsin," made by the Searle & Hereth Co., of this city.

Q. 10. Has that competition been a fair or unfair one?

A. A very unfair one, as it is offered as a substitute for Warner's preparation "Pancreopepsine," and also our travellers inform me that they sell it at a cut-rate price in order to get their preparation, "Pancro-Pepsin," in the hands of druggists as a substitute for Warner's. At the same time it is very confusing to the retail druggists to distinguish between the two preparations, and also very confusing to stock clerks in the jobbing-houses, as we have had their
31 buyers come into our place of business with orders calling for Pancro-Pepsin. The stock clerks in the wholesale houses, as a rule, are not educated pharmacists and might very easily mistake one for the other in filling orders.

Q. 11. When you were traveling for Wm. R. Warner & Co., did you personally observe any confusion as to the two preparations?

A. I did. Doctors were constantly confused, for there is so many special preparations of different kinds on the market for various diseases that it is difficult for them to remember the exact name or phraseology or spelling of the name. Druggists would also become confused in filling prescriptions, thinking they were identically the same, not noticing the difference, sometimes on the orders to the jobbers where ours was intended this other article called Pan-

cro-Pepsin would be sent if that jobber happened to handle Searle & Hereth's goods.

Q. 12. Has your firm met any such difficulties in Chicago and its vicinity?

A. Yes, many of them. Some have been reported to me by our travelers, and others I know of personally.

Q. 13. Please state whether prior to the commencement of this suit you made any specific attempts to ascertain whether any such confusion would result amongst the retail druggists, and, if so, what was your experience?

A. I did. There were six different prescriptions which I sent out to have filled. The prescriptions each specified "Liquid Pancreopepsine," which is our trade-mark and represents our goods only. One of them was sent to A. J. Benson, a druggist of this city, and the prescription was written by Dr. Bate; the prescription number was 44,266. Another one was sent to Eugene Webber's old pharmacy, now run under the name of Weyer pharmacy; the number of
the prescription was 55,850; the prescription was written by
32 Dr. Ross. Another was sent to Herman Fry. This prescription was also written by Dr. Ross. The number of the prescription was 42,608. Another was sent to F. E. Stolze, and was written by Dr. Bate; the number of the prescription was 42,009. Two others were sent outside of the city. I have no record with me of their names. In all the above none of them was Wm R. Warner & Co.'s preparation used in filling it, but was of the firm of Searle & Hereth make. Copies of the prescriptions, of those filled in this city, was furnished by the druggist. Three of the copies were written "Liquid Pancro-Pepsin," although the original prescription called for "Liquid Pancreopepsine." One was written "Liquid Pancreopepsine," although "Pancro-Pepsin" was furnished in filling the prescription. This shows very conclusively that the druggist, either knowingly or unknowingly, substituted the Searle & Hereth preparation on these prescriptions.

Adjourned for lunch.

Met pursuant to adjournment at 1 p. m.
Present as before.

Q. 14. Have you a price-list of the Searle & Hereth Co.?

A. I have.

Q. 15. Of what date?

A. One of 1895 and one of 1897.

Q. 16. Turning to the 1895 price-list of the Searle & Hereth Co., I ask you whether you find any alleged formula of the medicinal preparation designated as "Pancro-Pepsin"?

A. I do.

Q. 17. On what page; and read said formula as there given?

33 A. Page 55; formula given is as follows: "Pure pancreatin, 6 oz.; pure pepsin, 8 oz.; vegetable ptyalin, 4 drachms; lactic acid, 5 fl. drs.; hydrochloric acid, 5 fl. drs., sugar of milk."

The price-list referred to by the witness is offered in evidence and marked "Complainant's Exhibit Defendants' Price-list."

Q. 18. I notice from this formula that pancreatin and pepsin are not the only ingredients in the medicine called "Pancro-Pepsin." In Wm. R. Warner's medicine called "Pancreopepsine," are pancreatin and pepsin the only ingredients or not?

A. No, sir.

Q. 19. Is there any such medical term as pancro or pancreo?

Objected to as immaterial.

A. No, sir.

Q. 20. Is the designation or trade-mark Pancreopepsine a fanciful, coined term, or is it a medicinally descriptive term?

Objected to as leading and incompetent.

A. A coined term.

Q. 21. State the reasons for the opinion you have just expressed.

Objected to as incompetent and as leading, in view of the preceding question.

A. Pancreo represents nothing; it may refer to drugs or it may refer to parts of the human body. The originator's intention I could not say. Pancreo might be derived from a great many different names, but as used here it is certainly a fanciful term, for it means nothing.

Q. 22. To what part of the human body do you refer in the last answer?

A. To the pancreatic glands. All words of every prepara-
34 tion can be traced back through the Greek or Latin languages to some particular word that is entirely different in sound.

Q. 23. Would it be possible to trace the word pancreo or the word pancro to any designation of muriatic acid in any language?

Objected to, since this witness has not qualified as an expert in philology. Further objected to as leading.

A. I think not.

Q. 24. The medicinal preparation Pancreopepsine you have already stated includes other substances besides pancreatin and pepsin. Would it be possible to trace connection between these words and those other substances?

Objected to as immaterial.

A. No.

Cross-examination by Mr. DYRENFORTH:

X Q. 25. In putting the compound Pancreopepsine upon the market, does the firm of William R. Warner & Co. trace its name upon the label?

Objected to as immaterial and irrelevant.

A. Yes.

X Q. 26. In any one of the prescriptions which you had written by certain physicians, did the name of William R. Warner & Co. appear in connection with the word Pancreopepsine?

Same objection.

A. No; because there is only one Pancreopepsine upon the market.

X Q. 27. You say you had six prescriptions made out by different physicians. Were any of these prescriptions *bona fide* prescriptions made out at the instance of the physician himself, or were th-y moot prescriptions written by the physician under your direction?

35 A. They were written by my directions. I have seen prescriptions in the past that were *bona fide*, that did not contain Warner's preparation when Pancreopepsine was called for.

By Mr. DYRENFORTH: All that portion of the answer following the first sentence is objected to as irresponsive to the question, and volunteered.

X Q. 28. Am I to understand from your answer to direct question 21 that you do not, as Mr. Andrew J. Benson, the first witness called, did, regard the word Pancreopepsine as suggestive of the ingredients pancreatin and pepsin, and therefore of a digestive containing those substances?

Objected to, because Mr. Benson's deposition, take as a whole, is to the contrary of the question, and therefore the question is misleading, and in this connection attention is called to answers 8 and 10 of Benson's redirect examination.

A. I can only state, as I did before, that it might refer to drugs or parts of the human body.

X Q. 29. You are taking an active interest, are you not, in the conduct of this litigation?

A. I am in the employ of the firm of William R. Warner & Co.

X Q. 30. Have you not special charge of matters pertaining to this suit in Chicago?

A. Not particularly so, as the Philadelphia house is looking after the evidence in general.

X Q. 31. Who advised you or instructed you to have moot prescriptions written by physicians and filled by druggists, for use in this case?

Objection is taken to the term "moot" as such prescriptions were in no sense moot.

A. Myself only. It is something we very often do to find
36 out to what extent our different preparations are substituted.

X Q. 32. Did you tell the different physicians who wrote those prescriptions the purpose for which they were intended?

A. I did not.

X Q. 35. Were you personally known to the physicians?

A. Yes, sir.

X Q. 34. Do you think that any one of them supposed that he was writing a *bona fide* prescription?

Objected to as immaterial and irrelevant.

A. As to that, I could not say.

X Q. 35. Are all the prescriptions in blank so far as the name of any patent is concerned?

A. I think so. Doctors oftentimes do not give the name on the prescription.

X Q. 36. Did you personally take one of Dr. Bate's prescriptions to Mr. A. J. Benson to be filled?

A. No, sir.

X Q. 37. By whom did you send it?

A. By Mr. Blyden.

X Q. 38. Who is he?

A. He is in a mailing specialty business of some sort or another.

X Q. 39. Did you personally take any of the prescriptions calling for Pancreopepsine to a druggist to be filled?

A. Not of this particular lot.

X Q. 40. Please tell to whom you gave each of the six prescriptions to which you have referred, for the purpose of having them filled by a druggist?

A. Two of them to Mr. Blyden, two to Mr. Miller, in the Como block, and two to Mr. Stevenson.

X Q. 41. What is Mr. Miller's business?

A. He is in the medical specialty business.

37 X Q. 42. What is Mr. Stevenson's business?

A. Commercial traveler.

X Q. 43. Is Mr. Stevenson the person who took two of the prescriptions out of the city?

A. Yes.

X Q. 44. Did you instruct Mr. Blyden as to which druggists you wished the two prescriptions taken to which you gave him to have filled?

A. No, sir.

X Q. 45. What happened in the case of the prescription which was sent to Eugene Webber's pharmacy?

A. It was filled with Searle & Hereth's preparation.

X Q. 46. How do you know that fact?

A. By the coloring, odor, taste, and also because the copy of the prescription was written "Pancro-Pepsin."

X Q. 47. Where did you see a copy of the prescription?

A. It was returned to me.

X Q. 48. How did the copy of the prescription come to be returned to you, as you express it?

A. Because I asked him to get a copy of this prescription.

X Q. 49. What happened in the case of the prescription which was given to Herman Fry to be filled, and you may answer also as to the one given to F. E. Stolze?

A. The same as in the Webber case.

X Q. 50. Do you know whether any of these druggists had any

knowledge of a preparation manufactured by William R. Warner & Co., and sold under the name of "Pancreopepsine?"

Objected to as immaterial and irrelevant.

A. Not to my own knowledge.

38 X Q. 51. What is the proportion of vegetable ptyalin to pure pancreatin in the formula which you have quoted from "Complainant's Exhibit Defendants' Price-list"?

A. One to twelve.

X Q. 52. What is the proportion of vegetable ptyalin to the pure pepsin in the formula?

A. One to sixteen.

X Q. 53. What is the proportion of the hydrochloric acid to each of the ingredients pancreatin and pepsin in the formula?

A. The proportion of five drachms to six ounces of pancreatin and five drachms to eight ounces of pepsin. The same is true of the lactic acid.

X Q. 54. Is it not your understanding that the sugar of milk is used as a diluent?

A. Yes; in the tablets and powder.

X Q. 55. Do you understand the formula which you have quoted to be the formula for liquid Pancro-Pepsin of the defendants' production?

A. That is what they publish in their price-list, but manufacturing chemists, as a rule, do not always publish the correct amount of each drug in a preparation and oftentimes one of the most important ingredients may be left out altogether, so as to prevent the retail druggists from making it up and other manufacturers from knowing the exact working formula of the particular manufacturer's productions.

X Q. 56. Do you understand that Wm. R. Warner & Co. were the first to produce a medicinal compound in which pancreatin and pepsin were employed together as the only or predominant ingredients, for the purpose of producing a general digestion?

Objected to as not cross-examination.

39 A. That would only be a supposition on my part, as I was quite a small boy when they introduced this preparation on the market.

X Q. 57. Are you not able to answer the question from your reading?

Objected to, and also as calling for secondary evidence.

A. Doctors may have prescribed the combination, but I do not recall any previous preparation put on the market.

X Q. 58. In the formula referred to above, what is the proportion of the aggregate of pancreatin and pepsin to the aggregate of other ingredients aside from the diluent?

A. Fourteen drachms to fourteen ounces.

X Q. 59. What would you understand as to ingredients from the name bromo camphor?

Objected to as not cross-examination.

A. At the present day there is very little dependence to be placed upon the name. For instance, a preparation on the market called Bromo Pepsin contains no pepsin, Bromo Celery contains no celery, except for flavoring. Bromo Kola, contains no kola, except for flavoring. Syrup of Figs, it has been decided that there is no figs in them. So unless a person knows the working formula, they can only surmise as to the ingredients. Celery is known as a nerve tonic, therefore it is chosen as a name for Bromo Celery. Pepsin is used for digestion, therefore they chose the name Bromo Pepsin. Figs is known as a laxative; that is why they choose that name to represent a laxative compound. Many other cases might be mentioned. So, in these days names imply very little, except for an advertisement.

X Q. 60. Leaving out the element of deception, what do you understand by the designation bromo-camphor?

40 Objected to as not cross-examination, and because it is already answered.

A. From a pharmacist's point of view, nothing.

X Q. 61. Please explain what you mean by your expression, "a pharmacist's point of view."

Same objection.

A. One who has experience in pharmacy at the present day.

X Q. 62. Would you not understand that if the term was not deceptive it implied that bromine and camphor entered into the compound as ingredients?

A. I suppose so.

X Q. 63. In other words, though the term bromo-camphor is not literally descriptive, it is highly suggestive, is it not?

Same objection.

A. Not at the present time, when we have Bromo Corn Cures, Bromo Chewing Gum; and I would be safe in saying, 500 other different bromos on the market today. Bromo is supposed to have been a coined word, and has never been decided otherwise, to the best of my knowledge.

X Q. 64. Does your last answer revive the element of deception?

Same objection.

A. Yes.

X Q. 65. Please hereafter eliminate the element of deception in answering my questions. What would you understand by the term "Bromo-Iodine Soap"?

Same objection.

A. I don't understand anything particularly by it. If by the word bromo they mean to say that there is bromine in the soap, I take it as deceptive.

X Q. 66. If not deceptive, does not the term suggest the presence of bromine in some form with iodine?

41 Same objection, and also because the question assumes the condition of things at the present time and not at the time when the word bromo was first coined.

A. If not deceptive, it might.

X Q. 67. If not deceptive, does it not necessarily?

Same objection.

A. It might suggest some particular form of bromine or iodine. That would be the smallest portion of the soap, and but slight traces would be shown.

Same objection.

X Q. 68. If not deceptive, does not the term "Bromo-Iodine Soap" necessarily imply that bromine and iodine enter into the composition of the soap?

Same objection.

A. It might suggest small traces. I should say, mostly, a fanciful term.

X Q. 69. Is that the most accurate answer that you feel that you could give to my question?

Same objection.

A. I think so, for the name of the preparation.

X Q. 70. For how long a time, according to your knowledge or professional information, has the term "Bromo" been used as a prefix to the name of another drug to imply that bromine and the other drug are in association?

Objected to as unwarranted by the preceding answers of the witness, and therefore containing a misleading assumption.

A. I think bromine has been in use for a hundred years or more, but I have no information as to its connection with bromine in the sense indicated by the question.

X Q. 71. In what sense has the word or term "Bromo" been used for the long period which you designated?

A. Of that I have no knowledge, as I know the names
42 only in connection with it. The meaning at the present day is that bromo is good when a fellow has been on a "jag."

X Q. 72. You say in answer to question 11 of your direct examination that doctors were constantly confused by the similarity of name between the Pancreopepsine of the complainant and the Pancro-Pepsin of the defendants. On what do you base this assertion?

A. As stated in the previous answer, on a similarity of name, the two being very similar in spelling, phraseology and sound.

X Q. 73. It is quite obvious that you did not understand the question. I request the notary to read it over and if it is not perfectly clear to you I will endeavor to make it so.

Question re-read.

A. By my personal experience with them.

X Q. 74. Please give an instance in detail, with the name of the physician.

A. I am unable to recall this at the present time, as I have been off the road for about six years, but I used to see a great many of these imitations put in upon prescriptions for this and other preparations of ours.

X Q. 75. Can you recall any particular instance, with the name of the druggist, aside from those which you have already mentioned, as having grown out of the six prescriptions which you had specially prepared, wherein a druggist has furnished the liquid Pancro-Pepsin of the defendants by mistake, when the liquid Pancropepsine of the complainant was prescribed?

A. Not just at this moment. I will state that it was not always the liquid Pancro-Pepsin was given. Sometimes what was called Elixir Pancro-Pepsin was substituted.

X Q. 76. Can you give any special instance of the substi-
43 tution of Elixir Pancro-Pepsin for the complainant's product in the manner defined in the last question?

A. No, except a part of the original six mentioned above.

X Q. 77. You mean a part of the six prescriptions which you had specially prepared; is that correct?

A. Yes.

Redirect examination by Mr. BROWN:

R. D. Q. 78. If a medicinal preparation was designated as P, Pepsin, would you regard the letter P as fanciful and arbitrary or as descriptive and suggestive?

The question is objected to as purely fanciful.

A. It would certainly be fanciful.

R. D. Q. 79. If a preparation was designated as Panc., Pepsin, would you regard the prefix fanciful and arbitrary or descriptive and suggestive?

Objected to as immaterial and irrelevant.

A. Fanciful and arbitrary.

R. D. Q. 80. When a likeness between a prefix to a name or trademark to a definitive word, as, for instance, "bro." to the word "bromine," is remote, would or would not the prefix term be fanciful?

Objected to as immaterial.

A. It certainly would in that connection.

R. D. Q. 81. When an arbitrary term is first coined, you have indicated that it is to be regarded as fanciful, as, for instance, bromo a hundred years ago, or at the time of its origin, but when that same word has been used for a long period of time in connection with a particular substance and the trade gets to know the substance by that name, is it any longer fanciful?

Objected to as argumentative and leading.

A. Well, it does to a certain extent cease to be fanciful.

44 R. D. Q. 82. So that if the word bromo was arbitrarily used a hundred years ago to designate a substance technically termed at the time "bromine," but after this hundred years had passed with the word bromo applied to various compounds in the place of bromine, as a designation, I understand you that in the trade the term which was a hundred years ago arbitrary by long usage has now become as descriptive as bromine itself. Is that the way you wish to be understood?

Same objection.

A. Yes.

Recross-examination by Mr. DYRENFORTH:

R. X Q. 83. Do druggists carry pancreatin in jars or bottles?

A. Yes.

R. X Q. 84. Have you ever seen the name abbreviated on the bottles or jars?

A. I never have.

R. X Q. 85. Have you ever noticed whether the names were abbreviated or not?

A. I have handled it and seen it for a number of years in drug stores, but I have never seen a bottle of it yet abbreviated.

Examination closed.

ANDREW EDWARD REMICK.

45 Circuit Court of the United States for the Seventh Circuit, Northern District of Illinois.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY ET AL. } In Chancery.

CHICAGO, *July* 8, 1898.

Testimony in Behalf of Complainant Continued Pursuant to Notice.

Present: Frank T. Brown, Esq., attorney for complainant; P. C. Dyrenforth, Esq., attorney for defendants, and the witnesses named below. E. C. Semple, Esq., notary public, acting as special examiner by consent.

FREDERICK E. STOLZE, being duly sworn, deposes in answer to interrogatories propounded to him, as follows:

Q. 1. What is your name, age, residence and occupation?

A. F. E. Stolze; thirty-two; 261 Center street; druggist.

Q. 2. Have you, in the course of your business, dealt in William R. Warner & Co.'s preparation called "Pancreopepsine"?

A. Yes, sir.

Q. 3. For about how many years?

A. For about twelve years.

Q. 4. Have you, in the course of your business, dealt in a preparation called "Pancro-Pepsin" and manufactured by the Searle & Hereth Co, of Chicago?

A. Yes, sir.

Q. 5. For about how long?

A. Nearly five years.

46 Q. 6. Do you pay the same price for the preparation of each of these manufacturers?

A. No, sir.

Q. 7. Which is the cheaper?

A. The Searle & Hereth's is the cheaper.

Q. 8. Do the physicians whose prescriptions you fill for these preparations always designate in the prescription the name of the manufacturer or not?

A. Not always.

Q. 9. In such cases do you or not always know which preparation is intended?

A. No; not always.

Q. 10. From your experience as a druggist, state whether or not the name or trade-mark "Pancreopepsine" is close enough to the name or trade-mark "Pancro-Pepsin" to result in confusion to the public?

Objected to as incompetent, immaterial and irrelevant.

A. It is pretty close.

Q. 11. How long have you been in the drug business in Chicago?

A. About twelve years.

Cross-examination by Mr. DYRENFORTH:

X Q. 12. Where did you receive your education as a pharmacist?

A. Part in Germany and part here.

X Q. 13. In what part of Germany?

A. In Leipsig.

X Q. 14. If you received a prescription to fill, calling for "Pancreopepsine," would you recognize that name as the one used by William R. Warner, or by the Searle & Hereth Co.?

A. William R. Warner.

47 X Q. 15. If you received a prescription to fill, calling for "Pancro-Pepsin," would you recognize that name as the one used by the Searle & Hereth Co., or by William R. Warner?

A. The Searle & Hereth Co.

X Q. 16. Do you know what are the principal ingredients of "Pancro-Pepsin," the medicine manufactured by the Searle & Hereth Co.?

A. Yes; I know about what they are.

X Q. 17. What are they?

A. "Pancreatin," "Pepsin," "Hydrochloride Acid," and "Lactic Acid," and "Sugar of Milk."

X Q. 18. The sugar of milk is only the diluent, is it not?

Objected to as not cross-examination.

A. Yes.

X Q. 19. Which do you understand to be the leading medicinal ingredients of those you have named?

Objected to as not cross-examination, and because the witness has already answered it in his previous answer.

A. Pancreatin.

X Q. 20. How about pepsin?

Question withdrawn.

X Q. 21. In the last question which you answered, did you understand me to ask for the leading ingredient or the leading ingredients; that is to say, did you understand the word in the singular or in the plural?

This and the preceding question objected to as not cross-examination, and as calling for expert testimony for which this witness was not called in chief, or direct examination.

A. I understood it in the singular.

X Q. 22. Now, please state what you understand to be the
48 leading ingredients of the Searle & Hereth compound?

Same objections.

A. Pancreatin, pepsin, and hydrochloric acid.

X Q. 23. Do you know the proportion of hydrochloric acid to pancreatin in the formula?

Same objections.

A. No, sir; not sufficient to state.

X Q. 24. Do you know the proportion of hydrochloric acid to pepsin in the formula?

Same objection.

A. Not exact enough to state here.

X Q. 25. Do you know which are the two leading ingredients of the formula?

Same objections, and also as misleading.

A. Pancreatin and pepsin.

X Q. 26. Do you know the meaning of the word Austro-Hungary?

Objected to as not cross-examination, and as immaterial and irrelevant.

A. Yes.

X Q. 27. What does it mean?

Same objections.

A. Those are two countries in Europe.

X Q. 28. What are the two countries?

Same objection.

A. Austria and Hungary.
X Q. 29. Do you know the purpose that Pancro-Pepsin, manufactured by the Searle & Hereth Company, serves in medicine?

Same objections.

A. Yes.
X Q. 30. What is it?
A. It is used for indigestion.

49 Redirect examination by Mr. BROWN:

R. D. Q. 31. I hand you a prescription on which is stamped number 42,009, and the date Feb. 9, 1898, and ask you to look at the same and state whether you ever saw it before.
A. I have.
R. D. Q. 32. Please state when you saw it and what you did with it?
A. It was given to me and I filled it on the 9th of February, 1898.
R. D. Q. 33. Please read the prescription as it is written?
A. Liq. Pancropepsin, 4 ounces. Sig. 2 teaspoonfuls after meals.
R. D. Q. 34. By whom was manufactured the preparation with which you filled this prescription?

Objected to as immaterial.

A. By Searle & Hereth.
R. D. Q. 35. In naming, as you did in cross-examination, the principal ingredients of the Searle & Hereth preparation called "Pancro-Pepsin," did you base your answer upon any definite information or did you merely give a rough guess at it?

Objected to as leading.

A. Just guessed at it.

Counsel for complainant offers in evidence the prescription identified by this witness in answers 31 to 33, and marks the same "Complainant's Exhibit Stolze Prescription."
Objected to as incompetent, immaterial and irrelevant.

50 Recross-examination:

R. X Q. 36. In making the rough guess to which you have referred, what caused you to guess that pancreatin and pepsin were the two leading ingredients of the preparation "Pancro-Pepsin," manufactured by the Searle & Hereth Company?

Objected to as calling for secondary evidence, incompetent and not cross-examination.

A. If the medicine is good for indigestion, it takes those things to make it valuable, and I naturally guessed that as long as they have it on their label they have it inside too.

Re-redirect examination:

R. D. Q. 37. Have you from time to time seen the price-list of the Searle & Hereth Company, in which they describe the ingredients and formula for their preparation called Pancro-Pepsin?

A. I have seen the price-list.

FREDERICK E. STOLZE.

51 Circuit Court of the United States for the Seventh Circuit, Northern *District of Illinois.*

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH CO., GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman. } In Chancery.

Testimony in behalf of the complainant begun this 17th day of June, 1898, pursuant to notice, at the office of William R. Warner & Co., 1228 Market street, Philadelphia, Pa.

Appearances: Frank T. Brown, Esq., attorney for complainant; E. V. Myers, representing Mr. P. C. Dyrenforth, attorney for defendants; Theo. H. McCalla, notary public; E. B. Wright, typewriter, and the witness named below.

WILLIAM R. WARNER, being duly sworn, deposes and answers interrogatories propounded to him as follows:

Q. 1. What is your name, age, residence and occupation?

A. William R. Warner; 1306 North Broad street, Philadelphia; pharmaceutical chemist; age, nearly sixty-one years.

Q. 2. I hand you a certified copy of a trade-mark number 9911, registered December 26th, 1882, in the United States Patent Office to William Richard Warner, of Philadelphia, Penna., and ask if you are the same person in whose name this trade-mark was registered, and whether it was delivered to you after your proceedings had?

A. I am the William R. Warner named in the certificate of registration, both the original and the copy being here presented.

52 Q. 3. Are you the proprietor of the trade-mark described in this certificate of registration?

A. I am.

Q. 4. State whether or not you duly filed and executed the statement and declaration contained in such trade-mark as registered?

A. I did.

The certified copy of the certificate of registration No. 9911, dated December 26th, 1882, and above referred to, is now offered in evidence and marked "Complainant's Exhibit Certificate of Registration of Trade-mark."

Q. 5. When you adopted and used the trade-mark referred to in the certificate of registration, did you trade in your own name or do business under a firm name?

A. I did business, and have continued to do business, always since 1866 under the name and style of Wm. R. Warner & Co.

Q. 6. Were you at that time and since the proprietor of business done under the name of William R. Warner & Co.?

A. I was sole proprietor then and since.

Q. 7. When did you adopt and use in the trade the trade-mark "Pancreopepsine" set forth in such certificate of registration?

A. It was July, '76.

Q. 8. How do you know?

A. I know that upon my recollection or memory and the circumstance of having sampled Washington and Baltimore from a buggy used by Mr. Ramsey, which was in 1878.

Q. 9. When did you commence doing business on Market street in this city?

A. April 19th, 1876.

53 Q. 10. Did you use this trade-mark the same year?

A. I used it since the beginning. I did same year as beginning.

Q. 11. Did you ever use this trade-mark Pancreopepsine in commerce with foreign nations, and if so, when did you begin such use?

A. The first entry to which we have access on our books is Sept. 15th, 1881, a shipment to Sydney, New South Wales.

By consent copy of page 154 such book entitled "Wm. R. Warner & Co.'s Foreign Sales Book" is here made and entered in evidence in place of the book itself, it being understood that the book shall be held open for inspection of counsel for defendants at any time and introduced in evidence if he desires.

Page 154.

SEPT. 15TH, 1881.

W. H. H. Lane, Sydney, N. S. W.

Case No. 1.	2 doz. Pancreopepsine 8.00				
	£1. 12/	£	3.	4.	
" No. 2.	50 pounds cachous G. S. B.				
	$2.25 less 20% 7/3.....	£18.	2.	6	
	2 dz. bronch. tablets $1.50				
	less 10% 5/5.....	£	10.	10	
	1 gross cachous metal $12.00				
	25%—36/	£	1.	16.	
					£23. 13. 4

3. Samples.	400 sachet circulars.....	£	0.	3.	0
	400 perfume circulars....	£	0.	3.	0
	400 cachous circulars...	£	0.	3.	0
	1,000 parvules circulars.	£	0.	5.	0
	500 solubility circulars..	£	0.	3.	0
	500 Ingluvin books.....	£	1.	0.	0
	500 Australian price-lists	£	0.	8.	0
	12 dz. samples elixirs...	£	1.	0.	0
	12 dz. samples fluid ext..	£	1.	3.	0
	200 samples (bottles) parvules	£	2.	0.	0
	200 samples pills.....	£	1.	12.	0
	6 doz. samples dialysed iron	£	2.	5.	0
		£	33.	19.	2

Via sail.

Q. 12. Have you made any considerable efforts and spent considerable money in introducing your preparation designated as Pancreopepsine to the trade?

54 A. We have spent, estimating it roughly, $12,000 or $13,000, having distributed pamphlets several times to 100,000 physicians, paying $1,000 for postage stamps. Advertisement in medical journals and its proportionate expense for salary and traveling expenses paid salesmen and interviewers of physicians.

Q. 13. Has this business which you have thus built up at great expense been injured by competition?

A. It has very materially.

Q. 14. How and by whom?

A. By Messrs. Searle & Hereth of Chicago by the issuing of an imitation of the trade-mark in the name of which they dropped the letter "e," making it deceptive as a close imitation.

Q. 15. You have stated that you used your own trade-mark in commerce with foreign nations in 1881 and have referred to your books to prove it; and you have stated that you originally adopted and used such trade-mark in general trade in 1876 but have not referred to your books on this point. Please state whether such books have been preserved or not—this is, I mean the 1876 books.

A. They have not back of 1880, or part of 1879.

Cross-examination by Mr. MYERS:

X Q. 16. Has any other person at the present time an interest in your business?

A. No other person has an interest in my business at this time.

X Q. 17. Has any other person had an interest in your business since you began to use this trade-mark?

A. No other person has had an interest in the business of W. R. Warner & Company since the use of this trade-mark.

55 X Q. 18. Has any other person or firm used this trade-mark with your consent?

A. No, sir; they have not.

X Q. 19. You speak of a Mr. Ramsey; where is he now?

A. In the second story of this building.

X Q. 20. Do you rely upon your memory alone when you say you have used this trade-mark since July, 1876?

A. Partly upon my memory and the circumstance of Mr. Ramsey sampling Baltimore.

X Q. 21. You have consulted Mr. Ramsey about this date?

A. Yes, sir.

X Q. 22. Referring to Compiainant's Exhibit Certificate of Registration of Trade-mark, what are the main ingredients of the medicinal preparation in connection with which this trade-mark was adopted?

Objected to as not cross-examination.

A. Pepsin, muriatic, lactic and phosphoric acids and pancreatin. These are not all, but the chief ingredients.

X Q. 23. Has the formula for this preparation remained unchanged since you began to use the mark?

A. Substantially the same. Saccharated pepsin was used in the beginning and now a more perfect and stronger pepsin known as scale pepsin, 3,000 test.

X Q. 24. Pepsin and pancreatin are contained in greater quantities in this preparation than the other ingredients, are they not?

Objected to as not cross-examination.

A. They are not. That is, pancreatin is not.

WILLIAM R. WARNER.

56 IRENE HAFFA, being duly sworn, deposes and answers interrogatories propounded to her as follows:

Q. 1. What is your name, age, residence and occupation?

A. Irene Haffa; of mature age; address, 1023 Fairmount avenue. Order clerk with Wm. R. Warner & Co.

Q. 2. When did you enter the employ of Wm. R. Warner?

A. January 1st, 1877.

Q. 3. Specify the nature of your duties when you first entered the employ of Wm. R. Warner.

A. I had charge of the dummy. I filled the orders that came from the store for pills, fluid extracts, elixirs and patent medicines.

Q. 4. Please give the names which were upon some of the medicines which you handled when you first entered the employ of Wm. R. Warner.

A. Schenck's Pills, Ja-ne's Expectorant, Ayer's Hair Vigor, Pancreopepsine, Ingluvin.

Q. 5. Have you been in the employ of Wm. R. Warner ever since that time?

A. No.

Q. 6. How long did you remain in such employ after your first employment, January, 1877?

A. About fourteen years.

Cross-examination by Mr. MYERS:

X Q. 7. Do you recollect how long it was after you entered the employ of Warner & Co. for the first time that you began to handle Pancreopepsine?

A. We had daily calls for Pancreopepsine and other medicines from the beginning of my employment.

X Q. 8. Do you fix the date of the beginning of your employment by your memory or by any written document?

57 A. I entered the employ on New Year, and therefore remember it having been a holiday. I remember the year, because it was the year after the Centennial.

X Q. 9. Do you recollect whether this Pancreopepsine was in a regular commercial-sized bottle when you first began to handle it?

A. Yes, sir.

X Q. 10. You do not know whether it was for the purpose of filling orders or for distribution as samples?

A. For filling orders. I did not attend to any samples.

X Q. 11. When did you resume your connection with Warner & Co.?

A. About three months after I left. I have been with them since that time.

IRENE HAFFA.

FRANK M. RAMSEY, being duly sworn, deposes and answers interrogatories propounded to him as follows:

Q. 1. What is your name, age, residence and occupation?

A. Frank M. Ramsey; age, forty-six years; Glenside, Pa.; manager for Wm. R. Warner & Co.

Q. 2. How long have you been connected with Wm. R. Warner & Co.?

A. Over twenty-six years.

Q. 3. I hand you the paper marked "Complainant's Exhibit Certificate of Registration of Trade-mark," in which trade-mark No. 9,911 purports to have been registered December 26th, 1882, to Wm. R. Warner. Please examine the same and state whether you had anything to do with ascertaining the data and preparation of forms connected with such registration.

58 A. As attorney for Mr. Warner I prepared the papers for the registration referred to, and at that time made thorough investigation so as to fix definitely upon the time it had been used.

Q. 4. Please state when the trade-mark Pancreopepsine referred to in said certificate of registration was adopted and used in trade by William R. Warner & Co.?

A. The date fixed by the investigation referred to in previous answer was the year 1876.

Q. 5. How do you fix this date?

A. At this time I base my answer upon the careful investigation made before preparing the papers, as referred to in previous answer.

Q. 6. Upon what did you base the result of your investigation at that time?

A. By referring the subject to the firm, and by familiarity with general matters, in connection with their products.

Q. 7. When you say you base it upon familiarity with general products, you mean so far as that feature is concerned your personal memory informs you?

A. Yes.

Q. 8. Were you connected with the firm in such position as would inform you at the time this trade-mark was adopted and put into use?

A. Generally speaking, yes.

Q. 9. Did you shortly after this trade-mark was put into use sample it, as it is called?

A. Between July 31st and September 15th, 1878, I personally distributed it in original packages to the doctors of Philadelphia, Pa., Baltimore, Md., and Washington, D. C.

Q. 10. And did these original packages thus distributed bear any designation or trade-mark?

A. They were labeled "Liquid Pancreopepsine."

59 Q. 11. If you know, state when Wm. R. Warner & Co. used this trade-mark in commerce with foreign nations?

A. Prior to application for registration.

Q. 12. Are there any records by means of which you can fix the dates more definitely?

A. There are.

Q. 13. Please refer to such records, and fix the dates.

A. In a book designated by Wm. R. Warner & Co. as foreign-sales book, used as a book of original entry, page 154, date September 15th, 1881. W. H. H. Lane, Sydney, N. S. W. Two dozen Pancreopepsine.

Q. 14. When was this entry made?

A. Upon the receipt of the order for the goods.

Q. 15. When was that?

A. September 15th, 1881.

Q. 16. Do you remember when Mr. W. R. Warner began doing business on Market street in this city?

A. Either the latter part of 1875 or the early part of 1876.

Q. 17. Can you state about how long it was after he began doing business on Market street that he adopted and began to use this trade-mark Pancreopepsine?

A. Not more definitely than some time during the year 1876. This information is based upon the same facts as presented in previous answers.

Q. 18. If you know, state whether Wm. R. Warner spent any considerable money in introducing the preparation which he named pancreopepsine.

A. He has.

Q. 19. Give generally the efforts which you are acquainted with.

A. By the distribution of circular matter by mail to the entire medical profession of the United States, so far as addresses could be obtained, by the distribution of circular matter, samples
60 in miniature and also in original-size bottles, by and through the traveling men employed by the house and further by the insertion of special advertisements in the medical journals and drug-trade journals generally.

Q. 20. Did these efforts and expense result in building up any considerable business?

A. They did. The increased business following the efforts have been attributed as a result.

Q. 21. Did the trade-mark Pancreopepsine become familiar to the trade in association with Wm. R. Warner's goods bearing such trade-mark?

A. It must have, because an increased demand was made for it.

Q. 22. Has Wm. R. Warner, doing business under the trade name of Wm. R. Warner & Co., suffered any loss in business pertaining to Pancreopepsine by competition of others?

A. I can only answer this by saying that the presumption is they have based the presumption upon facts which may have been made known to us from time to time that there was in competition a preparation similarly named, and, to the best of my recollection, offered at a lower price.

Q. 23. Who made this preparation similarly named and offered at a lower price, and what was the name given?

A. I am unable to state positively whether it was Searle & Hereth or the Searle & Hereth Company at the time information first came to me. The preparation I refer to was labelled "Pancro-Pepsin."

Q. 24. Was this competition of the Searle & Hereth Company a fair or unfair one, and give your reasons?

A. Unfair, because of the close imitation of the trade-mark of Wm. R. Warner.

Q. 25. Why did the close imitation of the trade-mark of
61 W. R. Warner & Co. by the Searle & Hereth Company make the competition unfair?

A. Because, in my opinion, it was calculated to deceive not only the ignorant persons but the learned profession of medicine and the druggist.

Q. 26. Were the defendants, before bringing this suit, requested to stop this unfair competition and made acquainted with the rights of W. R. Warner & Co.?

A. They were.

Q. 27. Did they stop or continue such unfair competition in trade?

A. To the best of my knowledge they have continued it uninterruptedly.

Q. 28. When the trade-mark "Pancreopepsine" was originally adopted and used by W. R. Warner & Co., did the labels bearing

the trade-mark Pancreopepsine have any explanatory matter definitive of its constituents and uses?

A. To the best of my recollection, beginning with its first issue, one or more subtitles were used in that connection, namely, "Warner's Digestive Fluid," "Liquor Pancreatis."

Q. 29. Did the pamphlets which were originally issued in introducing the preparation bearing this name further acquaint the public with the ingredients and uses?

A. Printed matter generally as issued in behalf of the preparation contained explanatory matter showing the general uses for the medicine. The composition or ingredients of the preparation were shown in a general way.

Q. 30. Has W. R. Warner, doing business under the style of W. R. Warner & Co., continuously used the trade-mark Pancreopepsine in connection with sale of the preparation from 1876 up to the present time?

A. He has.

62 Cross-examination by Mr. MYERS:

X Q. 31. What investigation did you make for the purpose of fixing the time as you have testified?

A. By asking the question of the firm and by examination of the books and certain papers which were at that time before me.

X Q. 32. In what year did you make this investigation?

A. In 1882.

X Q. 33. What position did you occupy with the firm of Warner & Co. at that time?

A. Manager.

X Q. 34. When did you assume the position of manager?

A. January, 1879.

X Q. 35. Were the samples you have referred to which were distributed at Philadelphia, Baltimore and Washington the first samples sent out?

A. They were the first samples distributed by me personally. Previous to that time I was not in a position either to distribute or give information concerning the same.

X Q. 36. Why not?

A. Prior to the date named, when I made the personal distribution of samples, my position was such with the firm that I was not called upon either to do the work of distribution or superintend the same.

X Q. 37. How long after the trade-mark Pancreopepsine was adopted by Mr. Warner were these samples distributed by you?

A. The difference in time between an unknown date in 1876 until July or August, 1878.

X Q. 38. You have read the entry of an order from your
63 foreign-sales book to W. H. H. Lane, under date of September 15th, 1881. Can you state of your own knowledge that this order was ever delivered?

A. I have every reason to believe so, without making an investiga-

tion, as it appears to have taken the same course usually applying to such shipments.

X Q. 39. Is there any memorandum in this book to the effect that the goods were delivered?

A. Nothing more than the usual check-mark used for indicating that the order had been put up. The additional information that it was shipped by sail, meaning a sailing steamer, most probably, from the port, and the further marks showing that a specific number was attached to the case containing the Pancreopepsine. The cases in all such foreign shipments being so numbered.

X Q. 40. When is the next shipment to foreign countries, as indicated by the book?

A. The next entry appears on page 188 of the foreign-sales book, under date of January 3rd, 1882, and which bears all the marks of having been shipped in due course, the Pancreopepsine having been packed in three cases numbered, respectively, 6, 7, 8. Entry February 4th, 1882, to Hatton & Laws, Launceston, Tasmania, records shipments to have been made March 29th, 1882.

X Q. 41. Are you able to state, of your own knowledge, that these three shipments were paid for?

A. I have every reason to believe so, without reference to the books.

X Q. 42. What books do you refer to?

A. The regular books of account, separate from the ordinary sales book, which was kept under my supervision and which I have referred to. This does not show anything further than the shipment and value of goods.

X Q. 43. Who are the principal purchasers of the me-
61 dicinal preparation which you sell under the name of Pancreopepsine?

A. The druggists.

X Q. 44. Do you retail any of this preparation?

A. The only retailing is done from our store, 1228 Market street, Philadelphia, or from our branch establishment, 197 Randolph street, Chicago, or from our New York branch, 52 Maiden lane.

X Q. 45. When did you first learn that the Searle & Hereth Company were putting Panero-Pepsin on the market?

A. As near as I can fix the date, about the middle of June, 1891.

X Q. 46. When did you serve notice upon them first?

A. As near as I can fix the date, the letter was mailed from Philadelphia June 19th, 1891.

X Q. 47. Has the sale of Pancreopepsine increased or diminished since that time?

A. I am unable to state, as I have made no comparisons of the sales.

X Q. 48. You still have a large sale of this preparation, do you not?

A. My impression, without making a comparison of yearly outputs, is that the sales are not as large as they have been in the United States, notwithstanding the fact that we have continued to advertise it and sample it very extensively.

X Q. 49. You cannot state that positively, however?

A. Not without making actual comparison. The impression is

formed through the fact that the shipments generally are subject to my supervision and observation.

X Q. 50. Do you know, of your own knowledge, that any person has been deceived into buying the Searle & Hereth preparation for your preparation?

65 A. Only through communication from employés of the house who may have written in or made statements to that effect.

X Q. 51. Do you recollect the source of their information?

A. I believe it to have been obtained in their capacity as representatives, traveling salesmen, salesmen or solicitors for the firm.

X Q. 52. Who has been deceived?

A. The doctor, the prescriber, the druggist, the dispenser and the patient, the consumer.

X Q. 53. Can you state any particular name?

A. Not of my direct knowledge.

X Q. 54. Can you state it by reference to communications you have received?

A. A druggist by the name of Andrew J. Benson, residence 2401 Indiana avenue, Chicago, Ill., and others.

X Q. 55. Do you know if any preparation of any pancreatin and pepsin was on the market before Mr. Warner commenced the manufacture of it?

A. I do not.

X Q. 56. Has Mr. Warner's preparation always borne his name?

A. So far as I know no other name has ever been applied to his preparations.

X Q. 57. This, I presume, is upon the wrapper and label?

A. That is what I refer to.

Cross-examination closed.

Redirect examination by Mr. BROWN:

The taking of testimony is now adjourned until Saturday, June 18th, 10 a. m.

R. X Q. 66. In entering new fields I believe you have testified that you give away samples; is that so?

—. ——.

66 PHILADELPHIA, *June 18th*, 1898—10 a. m.

Taking of testimony resumed pursuant to adjournment.

Parties present as before.

R. D. Q. 58. Since adjournment, if you have referred to books of the house relative to matter of sale to foreign countries of the goods having the trade-mark Pancreopepsine prior to filing of petition for trade-mark, please give the result of such reference.

A. I have referred to the cash book and ledger of the firm and find entry of full settlement for shipment made to Hatton & Laws, Launceston, Tasmania, previously referred to in testimony.

R. D. Q. 59. In answer to your cross-question 40 you refer to an entry of February 4th, 1882, of an order from Hatton & Laws, Tasmania, and to another record showing shipment of that order March 29th, 1882. Please refer to the page of the book showing the entry establishing shipment of the order, and make any explanations you desire.

A. The entry appearing under date of March 29th, 1882, page 219, was finally transferred forward under date of April 4th, 1882, page 227 of the same book, as was customary in executing such orders where special goods had to be made or obtained for its completion. The latter date shows shipping date.

R. D. Q. 60. In your cross-examination, in answers 36 and 37, you fix a date as July or August, 1878. Since adjournment have your investigations led you to any earlier date the same year.

A. They have led me to know, as shown by records, that liquid Pancreopepsine was manufactured by Wm. R. Warner prior to the date given in my previous testimony.

R. D. Q. 61. What date can you thus fix by document or record?

67 A. According to transcripts from the record, May 10th, 1878.

R. D. Q. 62. What has become of the documents and records showing the manufacture in 1876, and which you cannot now find, but which were examined at the time you prepared the original trade-mark application for registration in which the date was fixed at July, 1876?

A. The records referred to appear to have been entirely destroyed, amongst many others, in clearing out what was known as the old document room in which books and papers not in active use were deposited for keeping.

R. D. Q. 63. You have found no information which would lead you to change your original testimony, which you say was based upon your former investigation and memory that the trade-mark Pancreopepsine was used by Wm. R. Warner & Co. in 1876, have you?

A. I have not; but have rather strengthened my memory upon the subject, feeling that the date named was absolutely correct.

R. D. Q. 64. Have you now in the employ of W. R. Warner & Co. at this store any person who was in a position to handle goods marked Pancreopepsine at an earlier date than 1878?

A. We have a woman employé named Irene Haffa who, in the capacity of what is termed "dummy girl," handled proprietary medicines as early as the beginning of the year 1877.

Recross-examination:

R. X Q. 65. Have you been able to find any record of the payment for Pancreopepsine in the cases referred to in your cross-examination, other than the one to Hatton & Laws, in foreign countries?

A. I have not made any further investigation beyond the particular shipment referred to, Hatton & Laws.

68 A. It is customary in entering new fields for the advancement or sale of a preparation to distribute samples in connection with such printed matter as may be sent out. This need not necessarily be stated as having been done in every town or place in which orders have been solicited.

R. X Q. 67. You are willing to swear that the Pancreopepsine sent Hatton & Laws was actually paid for and not delivered to be used as samples?

A. Yes.

R. X Q. 68. In sampling in Baltimore and elsewhere in 1878 did you take any orders for Pancreopepsine?

A. My work at the time was intended more particularly to cover the distribution of the liquid Pancreopepsine directly to doctors. In doing this I was expected to interview them as to its merits and uses. In the course of the work, more particularly in Washington, D. C., when I had finished my visitations, I had on hand a surplus quantity of the preparation, which I left on sale with the then wholesale house of Scott & Cromwell, located on Pennsylvania avenue. There may have been other instances in which I made sales to the retail druggists of the various cities named, because it was my further duty to visit each and every drug store and inform the proprietor or some one in charge that I was sampling liquid Pancreopepsine to the doctors and felt it necessary to call upon them as well, so that they might be prepared to fill prescriptions which would undoubtedly follow my work. According to my memory, the lot of surplus samples left on sale with the firm of Scott & Cromwell were disposed of by them within a reasonably short period of time and that the firm received from them renewal orders.

R. X Q. 69. Do you recollect that you sold Pancreopepsine to any other person on this trip?

A. I cannot from memory say that I did, but I sold other
69 goods which may have included Pancreopepsine.

R. X Q. 70. Since the last adjournment have you made any investigation to find whether the sale of Pancreopepsine has increased or diminished since 1891?

A. I have made no further investigation.

R. X Q. 71. You say you were the attorney who prepared the application for the registration for the trade-mark Pancreopepsine. Do you recollect who originated the name?

A. No; not beyond the statement made by Mr. W. R. Warner that he had adopted it as his trade-mark.

R. X Q. 72. You have testified that a considerable sum of money has been spent by W. R. Warner & Co. for the purpose of introducing Pancreopepsine. Do you know how much?

A. I do not, not having anything to do with disbursements for advertising purposes, but from observation and the fact of giving supervision to such distribution comprising printed matter in various forms, thousands of dollars is the most or clearest statement I can make.

R. X Q. 73. And this expense has been distributed over the time from 1876 to date?

A. The expenditures referred to have been made from time to time covering the period during which I have been more closely identified with the work of advertising Pancreopepsine.

R. X Q. 74. Do you know if the Searle & Hereth Company advertised largely?

A. I do not.

R. X Q. 75. Do you know if they advertise at all?

A. As a matter of fact, no. Further than I have seen a catalogue such as is usually issued by manufacturing pharmacists.

FRANK M. RAMSEY.

Examination closed.

70 *Defendants' Evidence.*

United States Circuit Court, Northern District of Illinois.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY. } In Equity.

Depositions of witnesses in behalf of the defendant, taken by agreement of counsel, before M. S. Mackenzie, a notary public, acting as special examiner under the 67th rule in equity, as amended, at the office of Dyrenforth & Dyrenforth, 1552 Monadnock building, Chicago, Illinois, beginning on Friday, the 11th day of November, 1898, at 10 o'clock in the forenoon, formal notice being waived by complainant's counsel.

Present: Philip C. Dyrenforth, Esq., in behalf of the defendant; Frank T. Brown, Esq., in behalf of the complainant.

FRANK S. HERETH, a witness produced in behalf of the defendant, being duly sworn, deposes and says, in answer to questions by Mr. Dyrenforth, as follows:

Q. 1. What is your name, age, residence and occupation?

A. Frank S. Hereth; age, forty years; residence, Chicago; occupation, manufacturing chemist.

Q. 2. Are you connected with The Searle & Hereth Company, the defendant in this suit, and, if so, in what capacity?

A. Yes, sir; I am vice-president of the company.

Q. 3. What is the nature of the business which is carried on by the Searle & Hereth Company?

71 A. The manufacture of medicinal preparations and the marketing of same.

Q. 4. Does the Searle & Hereth Company manufacture and put upon the market any preparation or preparations to which it gives the name "Pancro-Pepsin"?

A. We make several preparations of this nature.

Q. 5. Please describe generally the different preparations which you manufacture and designate by the name "Pancro-Pepsin."

A. The original preparation we made was in the form of a pow-

der. Since this preparation was introduced we have added to the list of preparations several elixirs, a liquid, and a syrup. The pancro-pepsin in powder form is used for dispensing, in substance, either in bulk, powders, capsules, pills or tablets. The elixirs are flavored and sweetened hydro-alcoholic solutions of the pancro-pepsin itself. One of the preparations we make is a plain elixir of pancro-pepsin. In addition to this we make other elixirs containing various chemical salts; such as pyrophosphate of iron; quinine; strychnine, etc. The syrup we manufacture contains two or three ingredients besides the pancro-pepsin. This syrup is made by dissolving the medicinal ingredients in water and adding sufficient syrup to make it permanent. The liquid is a solution of pancro-pepsin in water with sufficient glycerine to keep it from spoiling.

Q. 6. What is pancro-pepsin?

A. It is a medicinal substance prepared from pepsin, pancreatin, ptyalin, with lactic and hydrochloric acids and milk sugar.

Q. 7. What is pancreatin?

A. It is a digestive agent prepared from the pancreas of various animals, chiefly the hog; I mean by this the pancreatin of commerce.

Q. 8. What is pepsin?

72 A. Pepsin is a digestive agent made chiefly from the mucous membranes of the stomach of the hog. This is the commercial pepsin I refer to also.

Q. 9. State whether or not pancreatin and pepsin are well and generally known to chemists, physicians and pharmacists as medicinal agents for promoting digestion?

A. They are.

Q. 10. What is ptyalin?

A. Ptyalin is a principle found in the saliva of animals, and which promotes the digestion of starchy foods. The ptyalin which we use in our pancro-pepsin, however, is not an animal product, but is known as vegetable ptyalin. It is prepared from malt, and has the same effect upon starch as the animal ptyalin has.

Q. 11. In your whole series of pancro-pepsin preparations what are the predominating ingredients?

A. In the powder the pancreatin and pepsin are the predominating ingredients. In the liquids the vehicle predominates. Of the medicinal ingredients of the liquids, however, the pancreatin and pepsin predominate. In this statement, by liquids I mean all the fluid preparations.

Q. 12. In these various fluid preparations to which you have referred, does the vehicle employed perform any function other than that of a diluent?

Objected to as leading.

A. It furnishes the medicine in a form which is preferred by some physicians in certain cases. A physician sometimes prefers to give remedies in a liquid rather than a solid form. I think it performs no other function than to give the physician the means of giving

the remedy in solution instead of in powdered form, with the idea that it may be more quickly effective.

Q. 13. When did your company first manufacture your
73 pancro-pepsin powder and put it upon the market under that name?

A. Possibly in the year 1889.

Q. 14. Do I understand that you are not certain as to your recollection of this date?

A. Yes, sir; I am certain that it was in either 1888 or 1889.

Q. 15. What are your particular duties in connection with the Searle & Hereth Company?

A. I have charge of all the manufacturing.

Q. 16. Under what circumstances did you come to designate the powder to which you have referred as pancro-pepsin, and who suggested that name for the preparation?

A. It is customary to name medicinal preparations with some title that will designate their composition or their use, or both, and it was in order that any one seeing the name should have some idea of its use that this name was given. I am quite sure that I gave the preparation this name myself. I felt certain that any physician, seeing this name, should at once know for what it was to be used, since every physician knows that pepsin and pancreatin are used in digestive disorders.

Q. 17. Does what you have just said with reference to the powder apply equally to the liquid preparations of the series?

A. Undoubtedly.

Q. 18. Prior to the time when you suggested and adopted the name pancro-pepsin, as you have testified, had you ever heard of any preparation that was upon the market of the United States under the name of "Pancreopepsine"?

A. I had never heard of any preparation at all by this name. If I had, I certainly would not have adopted the name pancro-pepsin.

74 Q. 19. Prior to the time when you suggested and adopted the name pancro-pepsin, as you have testified, did you know that William R. Warner, the complainant, had previously manufactured and sold a medicinal preparation which is called pancreopepsine?

A. I did not.

Q. 20. If you had seen a medicinal compound bearing the name pancreopepsine, what, as a chemist, would you have understood the name to signify?

Objected to as hypothetical, in view of the witness' previous answer, and as immaterial and irrelevant.

A. I undoubtedly would have thought that it was a preparation embodying the digestive agents pancreatin and pepsin.

Q. 21. If a medicinal compound should bear the name pancreopepsine, or pancro-pepsin, or any like descriptive expression of the substances pancreatin and pepsin, though as a matter of fact those

substances were not present in the compound, what have you to say as to whether the designation would be descriptive or not?

Objected to as grossly leading and assuming descriptiveness which is not warranted in the testimony.

A. Either of these names would be very misleading. My opinion is that these names given to any preparation or preparations would be intended to designate their composition, or, at least, some of the ingredients.

Q. 22. You have stated that throughout the pancro-pepsin series manufactured and sold by the Searle & Hereth Company the predominating medicinal ingredients are the pancreatin and pepsin. Please state generally the relative proportions.

A. I am not sure whether the pepsin or the pancreatin predominates, but they are used in much larger proportion than all the other medicinal ingredients combined.

75 Cross-examination by Mr. BROWN:

X Q. 23. Where were you residing when you first put out pancro-pepsin in any form?

A. In Omaha, Nebraska, where we started in business.

X Q. 24. What was the name under which you then operated?

A. We first operated under the name of Searle & Hereth, and afterward incorporated under the laws of the State of Nebraska, under the name of the Searle & Hereth Company, but I do not know whether it was before or after incorporation that the preparation was first made.

X Q. 25. Name some of the principal wholesale druggists in Omaha at that time.

A. The Richardson Drug Company, Blake, Bruce & Company, Goodman Drug Company.

X Q. 26. Do you not know that William R. Warner & Company at that time sold to the two first named druggists you have named in your foregoing answer the Warner preparations?

A. No, sir; I have no means of knowing that, although I think it more than probable that they did.

X Q. 27. Please describe, with some exactness, the composition of the preparation which you put upon the market as liquid pancro-pepsin?

A. It is a combination of pepsin, pancreatin, vegetable ptyalin, lactic and hydrochloric acids with glycerine and distilled water.

X Q. 28. What is the office of the lactic acid in its composition?

A. I do not claim to be a therapeutist, but I know that it is claimed that lactic acid is found in the secretions of the glands of the stomach, and is therefore supposed to be one of the agents of digestion.

76 X Q. 29. What is the office of hydrochloric acid in that composition?

A. It no doubt aids in the solution of the pepsin, and is, I believe, recognized as one of the agents of digestion.

X Q. 30. You know, do you not, that many physicians prescribe hydrochloric acid as a digestive agent?

A. I know that it is prescribed in digestive disorders.

X Q. 31. What quantity of hydrochloric acid is employed in your preparation of liquid pancro-pepsin?

A. I do not remember the proportion.

X Q. 32. What quantity of lactic acid is employed in that preparation?

A. I do not remember the amount of lactic acid used either, but would not hesitate to give you information on this subject, if required, after a reference to my formula books.

X Q. 33. What proportion of pancreatin is employed?

A. I do not remember this. I have so many hundreds of formulas pass through my hands it is impossible to remember the ingredients.

X Q. 34. Please consult your formulas during the recess and inform us as to the proportions of these ingredients in your preparation called liquid pancro-pepsin and also in the preparation which you call elixir pancro-pepsin.

A. I regard these formulas as private property and should not be willing to give these formulas entire.

X Q. 35. Please, after consulting your formulas, give the amounts of hydrochloric acid, lactic acid and pancreatin employed in liquid pancro-pepsin, as you make it, and in elixir pancro-pepsin?

By Mr. DYRENFORTH: The witness is instructed that in giving his testimony he need not disclose any further than he sees fit what he may regard as the secrets of his art.

77 Counsel for complainant objects to the above instruction as improper. The witness has been put upon the stand and led to testify that pancreatin and pepsin are the predominant medicinal ingredients of his preparations. That testimony states a conclusion necessarily based upon facts as to the proportions of quantities employed, and in cross-examination we have the right to test the accuracy of the conclusion by comparison with the factors or elements upon which it is predicated.

By Mr. DYRENFORTH: This witness is a defendant, brought under the compulsion of the complainant, since it is necessary for him to testify in his own behalf. He has stated a fact not a conclusion; but he does not desire, perhaps, to disclose specifically certain quantities for the possible benefit of the complainant and others. If, after consideration, the witness concludes that he does not wish to state specifically the proportions of certain ingredients inquired about, he will decline to answer under my instructions, and complainant's counsel may have his remedy, if any, on motion before the court.

By Mr. BROWN: This witness is not brought by the desire of complainant or under its compulsion, but voluntarily appeared in his own behalf to give testimony intended for his own benefit, and we have a right to search, by cross-examination, into his statements with a view to revealing the true facts upon which they assume to be predicated. Counsel for complainant is aware of his remedy in court in case he cannot obtain justice otherwise.

A. I will consider the matter and answer affirmatively or negatively after I have consulted my associates in business.

78 X Q. 36. What is the color of the liquid pancro-pepsin that you put upon the market?

A. I would describe it as a very pale straw color, as I remember it.

X Q. 37. It is practically the same color as the preparation manufactured by William R. Warner as liquid pancreopepsine, is it not?

Objected to as incompetent, immaterial and irrelevant.

A. I do not know. I am not familiar with Warner's preparation at all, and no other preparation is ever referred to in making it. The color is a natural one and is not added to or detracted from. I feel reasonably certain that the color darkens a little with age, but I am not absolutely certain of this.

X Q. 38. You, in referring to the color of your liquid pancro-pepsin, say it is a pale straw color, as you remember it. You have a sample of this liquid pancro-pepsin in the room, have you not?

A. There was a sample here this morning, but I did not examine it carefully.

X Q. 39. Will you please now examine it?

A. Yes, sir; I would still describe it as a pale straw color or a very light amber.

X Q. 40. Will you kindly deliver this bottle to the notary, in order that it may be introduced in evidence?

A. I will.

The witness does so, and the bottle of liquid referred to is offered in evidence by defendants' counsel, and is marked "Defendants' Exhibit Hereth Specimen Liquid Pancro-Pepsin."

X Q. 41. Do you manufacture and sell a preparation designated as thymenthol?

Objected to as immaterial.

A. Yes, sir.

79 X Q. 42. Is that a proprietary remedy with you?

A. I don't know that I am competent to properly define a proprietary remedy. I believe there is some little difference of opinion on what a proprietary remedy is.

X Q. 43. Do you think others have a right to use that designation applied to a similar preparation?

Same objection.

A. That would involve possibly some legal points that I am not clear upon, but I don't think that any one is likely to use it, if they know that we are making it, but I wouldn't be surprised if some one should make a similar preparation and call it by this or some very similar name. For instance, I have heard of a preparation on the market called menthymol. These names are descriptive of two of

the ingredients, in the case of thymenthol, at any rate, and I would infer the same with reference to menthymol.

X Q. 44. Is listerine a similar preparation to thymenthol?

Same objection.

A. It probably is.

X Q. 45. Listerine was manufactured before thymenthol, was it not?

Same objection.

A. Yes, sir.

X Q. 46. Do you consider that the proprietors of listerine would have the right to call listerine thymenthol and so place it upon the market?

Same objection.

A. Do you mean a legal or a moral right?

X Q. 47. So far as you are concerned, I mean a moral right.

A. No, sir, I do not.

X Q. 48. If they did it would damage your business, would it not, and deceive the public?

80 A. I am not sure about that, but I believe on general principles it would increase our sale of thymenthol if they did, since the greater number of people advertising this article would cause a greater demand. I would be glad to give them the permission to do this, if they would substitute the name thymenthol for listerine. I think their advertising would help us.

X Q. 49. Would you be glad to give them this permission knowing they would sell it at a less price than you?

Same objection.

A. Yes, if the price afforded a reasonable profit. They certainly wouldn't sell it at a loss, and if they could make a profit we could.

X Q. 50. Suppose they sold it at a price which would net a loss, would you still be willing to have them use the name thymenthol?

Same objection, and this objection is understood to be repeated to all questions on this subject, as immaterial and not founded on the direct examination.

A. That is a business proposition that would hardly be likely to arise, since people aren't in business excepting for the benefit of the profit. Whether such an arrangement as this would eventually be to our benefit or not is something we would have to consider, but I regard it as an absurd proposition.

Recess till 2 o'clock.

X Q. 51. What is the result of your investigation during the recess?

A. I have no particular objection to giving you the amount of acids used in this liquid and the amount of pancro-pepsin. Eight gallons of the preparation contain three fluid ounces each of lactic

and hydrochloric acids, and sixty ounces of glycerole of pancreatin.

81 X Q. 52. How much pancreatin in the sixty ounces of glycerole of pancreatin?

A. I am not certain as to the amount of pancreatin represented by the glycerole.

X Q. 53. About how much?

A. Not less than five and not more than ten ounces.

X Q. 54. Hydrochloric acid is much more intense in its action than pancreatin, is it not?

A. The two cannot be compared, really, because they have different offices. They do not both act upon the same kinds of food.

X Q. 55. What is the ordinary dose of hydrochloric acid as given by physicians?

A. The diluted acid, representing ten per cent. of its weight of absolute acid, is ordinarily given in doses of ten minims, more or less.

X Q. 56. The usual dose ranges from about five to ten drops, does it not?

A. Yes, sir, even much larger doses are sometimes given.

X Q. 57. What is the usual dose of pancreatin?

A. Oh, it is given in doses of from one grain upward, when given by itself.

X Q. 58. Up to what?

A. Even ten grains may be given.

X Q. 59. Please inform us, through the medium of a common denominator, how much hydrochloric acid and lactic acid and pancreatin there would be in a single dose of your pancro-pepsin, and state the dose?

A. Three ten hundred and twenty-fourths of the liquid is hydrochloric acid, three ten hundred and twenty-fourths of the liquid is lactic acid, and sixty ten hundred and twenty-fourths is glycerole of pancreatin. I think the dose is stated to be from a teaspoonful to a tablespoonful.

82 X Q. 60. This sixty ten hundred and twenty-fourths of pancreatin is the glycerole of pancreatin, is it not?

A. Yes, sir.

X Q. 61. And the glycerole of pancreatin contains about one-twelfth of pancreatin proper, does it not?

A. It is certainly between one-twelfth and one-sixth pure pancreatin.

X Q. 62. According to this, the hydrochloric acid is greater in proportion to the dose than the pure pancreatin, is it not?

A. It certainly is not, even if the glycerole is only one-twelfth pure pancreatin. One-twelfth of sixty is five, whereas we have only three ounces of hydrochloric acid, and the pharmacopœial acid is a trifle less than one-third absolute hydrochloric acid, so that the three ounces of hydrochloric acid represents a little more than one ounce of H C_1. These are fluid ounces that I am speaking of. Now, a fluid ounce of hydrochloric acid will weigh more than an avoirdupois ounce, or it will weigh more than one fluid ounce of water.

In getting the actual percentage of actual hydrochloric acid contained it would be necessary to calculate the weight of the three fluid ounces of hydrochloric acid and then estimate the weight of the absolute acid contained.

X Q. 63. Is it not a fact that hydrochloric acid is much more powerful in its action, for the same quantity, than pancreatin?

A. More powerful in what respect, what action do you mean? Hydrochloric acid by itself has no digestive effect upon albumen or fats. I might state, then, Mr. Brown, that your questions relative to doses of pancreatin were answered by me with the understanding that the pancreatin itself was meant, and not the pancreatin in combination with other agents. A physiological chemist would probably tell you that pancreatin, in combination with an acid, is not
83 effective at all. This is not a question though that a pharmacist is likely to solve.

X Q. 64. When did you first put up liquid pancro-pepsin and send it out?

A. It certainly was within a very short time after we first made the powder, but I do not know how long.

X Q. 65. Did Mr. Warner, or some one representing him, ever notify you that your use of the name was damaging to him, and ask you to desist?

A. Mr. Warner has had a representative call upon us several times and request us to discontinue the use of the name, but I do not remember any statement made by the representative that it was causing him any financial injury.

X Q. 66. He charged that you committed a wrong in imitating his name, or rather the name of his medicine, did he not?

A. He made this claim, but we told him that we regarded the name as purely descriptive of the composition and use of the remedy. I told Mr. Warner's representative that the preparation we originally made, that is, the powder, was so different from his preparation that we thought he could have no claim against us. I afterward stated to him, and at one time to Mr. William R. Warner personally, in Philadelphia, that out of courtesy we would gladly discontinue making the liquid pancro-pepsin, but not because we thought he had any right to the name. I believe Mr. Warner and his representative both, at different times, stated that this would not be satisfactory, so we dropped the matter without taking any action. This is to the best of my recollection.

X Q. 67. You did not discontinue the manufacture of the liquid preparation in connection with this name, did you?

A. No.

84 X Q. 68. Mr. Warner never told you that it would be unsatisfactory for you to discontinue the name in connection with the liquid, but merely that he did not regard that as sufficient satisfaction. Is not this correct?

A. My impression is very strong that such is not the case.

X Q. 69. You at one time talked of discontinuing the use of the name if Warner & Company would pay you for the labels already printed, did you not?

A. I believe that is true, but we did not offer to make this concession because we thought we were in the wrong, but out of courtesy to Mr. Warner.

X Q. 70. Did you ever analyze the pancreopepsine made by William R. Warner & Company?

A. No, sir, I never have made any chemical examination of it at all, since I was not trying to imitate it.

X Q. 71. Then you do not know which is the predominating ingredient of William R. Warner's pancreopepsine, do you?

A. No, sir, I have never felt any desire to know.

X Q. 72. Can you say whether or not your first sale of liquid pancro-pepsin was prior to 1891?

A. Oh, yes, undoubtedly. We moved to Chicago in the spring of 1890 and had been making it some time prior to this.

X Q. 73. In some of your fluid preparations of pancro-pepsin bismuth is added as an ingredient, is it not?

A. Yes, sir.

X Q. 74. Which is the predominating ingredient in such case?

A. There is at least as much ammonio-citrate of bismuth in a fluid ounce as there is pure pancreatin, but there is much less strychnine. In this case the words "with bismuth and strychnine" form a part of the title of the preparation.

85 X Q. 75. Is it your opinion that the name thymenthol is descriptive of the ingredient thymol contained therein?

Objected to as incompetent, immaterial and irrelevant, and as having no foundation in the direct examination.

A. It would unquestionably mean, to my mind, that the preparation does contain either thymol or thyme.

X Q. 76. In your bottles of liquid pancro-pepsin you add to the title on the label, amongst other things, the following description or definition:

"Pancro-Pepsin is composed of the essential elements concerned in the digestion of foods, namely, pepsin, pancreatin, ptyalin, lactic and hydrochloric acids."

Is not this correct?

A. Yes, sir.

X Q. 77. You also in your price-list, under the title pancro-pepsin, give the ingredients. Is not this correct?

A. Yes, sir.

X Q. 78. Why do you this on the labels of your bottles?

A. In order that physicians may be informed as to the composition of the remedies, and in order that druggists may intelligently dispense them.

X Q. 79. The label on the bottles does not inform the druggists as to the proportions of these ingredients, does it?

A. You are speaking of the general line, are you not?

X Q. 80. No, I am speaking of the bottles of liquid pancro-pepsin.

A. It does not.

X Q. 81. Which are the active agents in the substance known as pancreatin?

A. Pancreatin is stated by authorities to contain three or four active agents which are concerned in the processes of digestion.

X Q. 82. Which are they?

86 Objected to as incompetent, immaterial and irrelevant.

A. These principles are amylopsin, steapsin and trypsin, and a fourth ferment which is concerned in the coagulation of milk. The three principles named have a digestive effect upon the starchy foods (amylopsin), steapsin converts the fats and the trypsin albuminoids.

X Q. 83. Will pepsin act without the aid of hydrochloric acid?

A. It is probable that most of the pepsin of the market contain more or less hydrochloric acid, and therefore when properly diluted will have some action upon albumen. It is a fact, however, that a small added percentage of hydrochloric acid to a pepsin solution will increase the activity of the pepsin, as regards the amount of albumen dissolved. The amount of water present has a great influence. Hydrochloric acid, however, in aqueous solution does not peptonize albumen. Both seem to be necessary to get the best effect.

Redirect examination by Mr. DYRENFORTH:

R. D. Q. 84. I show you a package having upon it a label headed "Quarter Pound Pancro-Pepsin," and having at the foot the name of the Searle & Hereth Company as the manufacturers. What does that package contain?

Objected to as new matter and not redirect examination.

By Mr. DYRENFORTH: This is not new matter, as will appear from the answer. The witness has been cross-examined as to the whole series of pancro-pepsin remedies manufactured and sold by the Searle & Hereth Company.

By Mr. BROWN: I prefer to let the court decide whether it is new matter.

87 A. If the package is in the condition in which it left the laboratory, and I have no doubt it is, it contains a mixture of pancreatin, pepsin, vegetable ptyalin, lactic and hydrochloric acids, with sugar of milk. This mixture is the compound known as pancro-pepsin.

R. D. Q. 85. In what form are the assumed contents of that package?

Same objections.

A. In the form of a powder.

R. D. Q. 86. Is that the powder to which you have referred in your previous examination as being the first form which you manufactured and put upon the market?

Same objections.

A. It is.

R. D. Q. 87. Is that the powder which enters as the ingredient pancro-pepsin in the several fluid compounds to which you have referred?

Same objection.

A. Its essential constituents are the same. I mean by that that the liquid preparations are not made directly from the powder, since the powder contains sugar of milk, which is not essential in the liquid.

The package referred to by the witness is offered in evidence by defendants' counsel, and is marked "Defendants' Exhibit Package Defendants' Pancro-Pepsin Powder."
Same objections to exhibit.

R. D. Q. 88. I show you a bottle having upon it a label headed "Elixir Pancro-Pepsin and phosphates, iron, quinine, and strychnine," and having at its foot the name of the Searle & Hereth Company. What is that bottle supposed to contain?

Same objections.

A. It contains the essential elements of pancro-pepsin, com-
88 bined with the phosphates of iron, quinine and strychnine in solution in an aromatic, sweetened hydro-alcoholic liquid.

R. D. Q. 89. Is that one of the pancro-pepsin compounds manufactured and sold by the Searle & Hereth Company?
A. It is.

The bottle referred to by the witness is offered in evidence by defendants' counsel, and is marked "Defendants' Exhibit Defendants' Pancro-Pepsin Elixir No. 1."
Same objections to exhibit.

R. D. Q. 90. I show you a bottle having a label headed "Elixir Pancro-Pepsin," and having at its foot the name of the Searle & Hereth Company. What is that bottle supposed to contain?

Same objection.

A. The essential elements of pancro-pepsin in the same vehicle the previous preparation was composed of.

R. D. Q. 91. Is this also one of the pancro-pepsin preparations manufactured and sold by the defendant?

Same objection.

A. Yes, sir.

The bottle last referred to by the witness is offered in evidence by defendants' counsel, and is marked "Defendant's Exhibit Defendants' Elixir Pancro-Pepsin No. 2.
Same objections to exhibit.

R. D. Q. 92. Do the four preparations; the Exhibit "Liquid Pancro-Pepsin," the Exhibit "Pancro-Pepsin Powder" and the two elixir exhibits comprise the whole pancro-pepsin series manufactured and sold by defendant?

A. No, sir; we make six elixirs, one liquid, one syrup and about six different tablets of pancro-pepsin and combinations.

89 R. D. Q. 92. On all your packages containing pancro-pepsin preparations, is the name pancro-pepsin printed in the same manner as it appears on the labels of the packages which have been offered in evidence—that is to say, in the hyphenated form that appears there and with capital letters for the two parts of the compound word?

Same objections.

A. I believe they are, without exception.

R. D. Q. 94. Have the labels of all your packages containing pancro-pepsin preparations the name of the Searle & Hereth Company upon them as the manufacturers, as appears in the packages which have been offered in evidence?

Same objections.

A. They have.

R. D. Q. 95. You have stated in your cross-examination that you offered, out of courtesy to William R. Warner, to withdraw your liquid pancro-pepsin from the series, although you felt that you had a perfect right to use the designation. Please state more fully, if you can recall them, the circumstances connected with this offer on your part.

A. I do not remember certainly whether I first made this offer to Mr. Warner personally or through his representative. We have always had a high regard for Mr. Warner and desired, if possible, to settle the matter amicably, especially since we feel that manufacturing pharmacists should be upon friendly terms with each other. We thought that this was as much of a concession as we ought to make. Had Mr. Warner's name for his preparation been an arbitrary one we would have dropped the name we selected. We have had what might be considered parallel cases submitted to us, and took the action our competitor requested.

R. D. Q. 96. Are the three exhibits which have been last offered in evidence three of the preparations as to which Mr. Warner
90 directly or through his representatives insisted that you should drop the designation pancro-pepsin as well as from the liquid preparation?

Objected to as leading.

A. He requested us to discontinue the use of the name Pancro-Pepsin upon any and all of these compounds that we made.

R. Q. D. 97. Upon what ground might you have refrained wholly from the adoption of the designation pancro-pepsin, if you had known before you made the powdered pancro-pepsin that Mr. Warner had a preparation upon the market which he designated liquid pancreopepsine and objected to your use of your designation?

Same objection.

A. Upon the general principle that we refrained as far as possible when naming any new preparation from even apparently trespassing upon the rights of any other manufacturer, real or suppositious.

R. D. Q. 98. Do you know of any substance other than pancreatin to which the abbreviation pancro could refer?

Objected to as new matter.

A. It might be used in connection with some word or term referring to the gland called the pancreas from which pancreatin is made but I know of no other word.

R. D. Q. 99. Then as a medical designation in connection with pepsin, what necessary signification has it?

Same objection and also as leading.

A. To me it necessarily brings to the mind pancreatin, since the word pepsin is linked with it. The word pepsin could scarcely be linked with the word pancreas. It has been my experience that when this name pancro-pepsin was brought to the notice of any druggist or physician he immediately concluded that the name belonged to a medicinal preparation composed of pancreatin and pepsin, which is to be used in the treatment of digestive disorders.

91 Last part of the answer objected to as volunteered and irresponsive.

FRANK S. HERETH.

Adjourned to Saturday, November 12, at 10 o'clock a m.

MONDAY, *November* 14, 1898—2 o'clock p. m.

Met pursuant to adjournment.

Present: Same as before.

Defendants' counsel offers in evidence two bottles of the complainant's product, liquid Pancreopepsine, one with and the other without the wrappers, and the same are marked "Defendants' Exhibit Complainant's Product with Wrappers," and "Defendants' Exhibit Complainant's Product without Wrappers."

It is stipulated by complainant's counsel that the two bottles with and without wrappers were purchased from the complainant's agent in Chicago, and that they represent samples of one style of label and wrapper which the complainant sends out with this preparation.

WALTER S. HAINES, a witness produced in behalf of the defendant, being duly sworn, deposes and says, in answer to questions by Mr. Dyrenforth, as follows:

Q. 1. What is your name, age, residence and occupation?

A. My name is Walter S. Haines; I am forty-eight years of age; I live in Chicago, and I am the professor of chemistry, pharmacy and toxicology in Rush Medical College of Chicago, the affiliated medical school of the University of Chicago.

Q. 2. What education and experience have you had tending to qualify you to testify as an expert in matters pertaining to medicinal and other chemical compounds, and designations of such compounds?

92 A. I began the study of chemistry about thirty-two years ago and have devoted myself since then wholly or in part to its study and practice, largely in connection with medicine. I had a year of instruction in chemistry at the Chicago high school, three years in the Northwestern university, nearly two years at the Institute of Technology in Boston, and between one and two years in Europe, chiefly in Paris under Professors Wurtz, Deville and Berthelot. I was appointed to my professorship in Rush medical college upwards of twenty-two years ago and I have held the position continuously ever since. My duties in the college are chiefly those connected with medical chemistry and include the subject of medical pharmacy. In these connections I am frequently called on to examine medicinal and other chemical compounds and to give instruction in the naming of substances used in medical chemistry and pharmacy. I am a graduate in medicine, having received my degree from the Chicago medical college in 1873.

Q. 3. I call your attention to several exhibits offered in evidence in behalf of the defendant in this cause, as follows: "Defendants' Exhibit Package Pancro-Pepsin Powder," "Defendant's Exhibit Hereth Specimen Liquid Pancro-Pepsin," "Defendant's Exhibit Defendants' Pancro-Pepsin Elixir No. 1" and "Defendants' Exhibit Defendants' Pancro-Pepsin Elixir No. 2." Please look at those exhibits and state what understanding, if any, is conveyed to your mind by the presence upon the labels of those several exhibits of the designation "Pancro-Pepsin," giving your reasons."

A. I have examined the exhibits in question and would say that the designation "Pancro-Pepsin" on their labels conveys to my mind the understanding that the chief constituents of the liquids and powder- referred to are pancreatin and pepsin.

93 A time-honored method of naming compounds of two or more substances is to use a term descriptive of the constituents; this, in fact, is the underlying principle of the greater portion of chemical and pharmaceutical nomenclature, much the larger number of substances in chemistry and pharmacy receiving names that are descriptive of their chief constituents. There are many methods of carrying out this general principle, and among others that of making a compound word by uniting the names of the principal ingredients of the substance in question, and for the purpose of euphony and brevity the latter part of the name of one of the constituents is often elided and the letter "o" substituted for it. Illustrations of this method of nomenclature are numerous and have been found on the pages of works devoted to chemistry and pharmacy for many years—in fact, when I began studying chemistry and medicine more than a quarter of a century ago such names were in frequent use. Among names of this kind which have been used for many years I may mention "nitro-glycerine," a substance produced from nitric acid and glycerine; "nitro-benzene," a compound obtained from nitric acid and benzene; "oleomargarine," a fat supposed, at the time it was named, to be composed of oleine and margarine; and "oleoresins," substances which are made up chiefly of oils and resins. A very large number of other similarly

constructed names might easily be given. In Watts' Dictionary of Chemistry, vol. 5, bearing the date of 1874, I find easily more than two dozen descriptive names built up on this principle; and in the index to Gmelin's Hand-Book of Chemistry, published at an earlier date than Watts' Dictionary, I find also a large number of words constructed in the same manner.

From the above it is clear that when in chemistry or phar-
94 macy we find a compound word like "pancro-pepsin" we know that it is descriptive of the chief constituents of the substance it is applied to; it is inevitable, therefore, that we should consider pancreatin and pepsin as the principal component parts of the material contained in the exhibits in question, as I have already stated.

Q. 4. Speaking from your personal knowledge, was it customary, for purposes of description, to compound the names of substances in the manner you have stated prior to the year 1876?

Objected to as leading.

A. It was; all the names given above as illustrations were used commonly prior to the year 1876.

Q. 5. Speaking from your knowledge as a pharmaceutical chemist and physician, are you able, upon seeing a medicinal compound labeled "pancro-pepsin," to arrive at any conclusion as to its medicinal purpose or ostensible medicinal purpose? If so, please state the conclusion and give your reasons.

Same objection.

A. Upon seeing a medicinal compound labeled "pancro-pepsin," I should know, from my knowledge of chemical and pharmaceutical nomenclature, that the substance contained pancreatin and pepsin as its chief constituents, and as both of these are used as agencies to promote digestion I should, without hesitation, arrive at the conclusion that the compound was designed as a medicinal substance to aid the process of digestion.

Q. 6. What is pancreatin, and for what purpose is it used in medicine?

A. Pancreatin is the active constituent of the pancreas. As found in pharmacy it is a powder and is generally extracted from the hog. It has the power of digesting practically all kinds of food, convert-
ing proteids into peptones, starch to sugar and fats into emul-
95 sions. On account of this property it is used in medicine as an aid to digestion, either by mixing it with the food out of the body or by administering it internally.

Q. 7. What is pepsin, and what are i-s functions in medicine?

A. Pepsin is the chief active constituent of the gastric juice. When combined with acids it has the power of converting proteids into peptones and thus rendering them soluble and capable of assimilation. On account of this power it is often administered in medicine as an aid to digestion.

Q. 8. In the designation pancro-pepsin, is there any substance in

medicine other than pancreatin for which the prefix pancro could stand?

A. Nothing with which I am acquainted. I have examined a large number of books dealing with medicinal substances, but I have been unable to find anything else whose name could by any possibility be changed into the prefix "pancro." The United States Pharmacopœia and the National Dispensatory, the latter of which especially is supposed to contain a nearly complete list of all substances used in medicine in this country, have been searched in vain for a name which could even be tortured into this prefix. It is true that the word "*pancreas*" *could give us the* same prefix, but as this organ owes its activity entirely to the pancreatin contained in it, and would be administered, if used at all in medicine, for the sake of the latter, the prefix "pancro," even if derived from pancreas, would still refer, so far as medicinal use is concerned, to pancreatin.

Adjourned to Tuesday, November 15, at 2 o'clock p. m.

96 TUESDAY, *November* 15, 1898—2 o'clock p. m.

Met pursuant to adjournment.
Present: Same as before.

Direct examination of WALTER S. HAINES continued:

Q. 9. If a medicinal compound is given the designation "Pancreopepsine," what signification, if any, would that designation convey to a pharmacist or physician?

Objected to as incompetent and immaterial, as the question is expressed.

A. It would convey the impression that the compound in question was composed of pancreatin and pepsin as its chief or most important constituents.

Q. 10. For how long have you personally known of the substances pancreatin and pepsin, and of their functions as digestives?

A. The substances pancreatin and pepsin and their value as digestive agents have been known to me for fully twenty-seven or twenty-eight years. I began reading medicine in 1870, and graduated three years later, and during that period pancreatin and pepsin and their use in digestion were frequently presented to me both by my text-books and by the lectures at the medical school.

Q. 11. With the knowledge of the substances pancreatin and pepsin, and their properties as medicinal agents in aiding digestion which you had prior to the year 1876, what would you have necessarily understood, at that time, upon seeing a medicinal compound bearing the designation either of pancreopepsine or pancro-pepsin? Please give your reasons in full.

Objected to as leading.

A. As I have stated in my preceding answers, I knew of pancreatin and pepsin for a number of years prior to 1876; I also knew of their

value as digestive agents in the physiological processes of the
97 body, and of their administration as medicinal agents to improve digestion. With the knowledge of these various points and with my knowledge also of the principles of chemical and pharmaceutical nomenclature I should have known at once, upon seeing a medicinal compound bearing the designation either of pancreopepsine or pancro-pepsin, that it was composed of pancreatin and pepsin as its chief constituents. I could not possibly have been mistaken in this understanding, for there is no other medicinal substance whose names could possibly be tortured either into "pancreo" or "pancro," except pancreatin, while the latter part of the word "pepsine" or "pepsin" could refer, naturally, to only one medicinal substance, namely, the active principle of gastric juice or pepsin (often also spelled pepsine).

Q. 12. Suppose that a medicinal compound should be labeled with the designation "pancreopepsine" or "pancro-pepsin" when as a matter of fact, it did not contain pancreatin and pepsin as its chief or only constituents, or as constituents in material quantity; what, under those circumstances, would you say concerning the appropriateness of the designation?

A. Under such circumstances the designation "pancreopepsine" or "pancro-pepsin" would be not only inappropriate, but would be misleading and fraudulent.

Q. 13. Please state, so far as you know, to what extent pharmacists and physicians were familiar with the substances pancreatin and pepsin and their properties in medicine prior to the year 1876, and what opportunities through standard publications were afforded for gaining such knowledge at that time?

A. Pancreatin has been known to the scientific world since the year 1845, when it was discovered by the French chemists Bouchardat and Sandras, who not only isolated the substance
98 but correctly described it and noted that it possessed digestive properties in certain directions. Pepsin has been known equally long as the chief active constituent of the gastric juice and as a digestive agent of much power. It was natural that physicians and pharmacists should avail themselves of the discovery of two such potent agencies for digesting food, but it was a number of years before either of these bodies was brought to the general attention of the profession at large. Pepsin was the first to come into popular favor, and during the later 60's it was much written about and considerably prescribed by physicians. About the same time pancreatin began to be used in medicine, but to a much more limited degree. Physicians and pharmacists were afforded abundant opportunity of learning of the value of both of these agencies through the medium of well-known publications. The United States Dispensatory, a book extensively used by druggists and physicians, in its thirteenth edition, printed in 1872, has considerables articles upon both pepsin and pancreatin, and speaks of their value as therapeutic agents; and the American Journal of Pharmacy, a widely read publication, contained articles upon both these substances in its volumes published during the early 70's. I have before me a bound vol-

ume of the last-named publication for 1871, and I find, by referring to its index, that there are seven articles in regard to pepsin, and one in regard to both pepsin and pancreatin, the latter appearing on page 24 under the heading "A combined solution of pepsine and pancreatine." Most of the information contained in this article had been published the year before in the well-known English medical journal "The Lancet," and in the London Journal of Pharmacy. I have also before me a bound volume for 1873 of the same American Journal of Pharmacy, and I find, by referring to its index, that it contains "Notes on pepsin," on pp. 322, 356, and 374; and
99 "Pancreatin, preparation and properties," on pp. 531 and 563. The article on p. 531 is entitled "Notes on pancreatin, by Richard V. Mattison (read at the pharmaceutical meeting November 18);" it covers more than two pages and describes a process of making pancreatin mixed with sugar of milk, to which the name "saccharated pancreatin" is given, and the article also imparts considerable information concerning the properties of pancreatin in general.

Without going further in this matter, it is perfectly clear from the above that several years prior to 1876 both doctors and druggists had abundant opportunity of learning about pancreatin and pepsin and of their use in medicine.

Q. 14. Could the views which you have expressed concerning the essentially descriptive nature of the designations "pancro-pepsin" and "pancreopepsine" be in any manner affected or modified by the fact that ingredients other than pancreatin and pepsin enter into the compound? In answering this question please state the grounds for any conclusion which you may give.

A. The views I have expressed as to the essentially descriptive nature of the designations "pancro-pepsin" and "pancreopepsine" would not be affected by the fact that other ingredients than pancreatin and pepsin enter into the compound provided these other substances were present in minor proportion and were introduced with the object of aiding the action of one or both of the principal constituents.

As I have said before in this deposition the underlying principle of nomenclature in both chemistry and pharmacy is to give names that shall indicate the chief constituents of the substances in question. It is agreed on all hands that minor substances may be present, especially if they are those that are intended to aid the action of the chief ingredients, without the slightest necessity
100 of mentioning them. The United States Pharmacopœia, the highest authority in America on the names and properties of remedial agents, furnishes numerous illustrations of this fact. I have a copy of the Pharmacopœia before me, and on p. 4 I find an account of "Vinegar of opium," from which it appears that this preparation, in addition to being made of vinegar and opium only, contains also nutmeg and sugar, the latter being used in twice the proportion that the opium is, while the nutmeg is used to the extent of thirty per cent. of the opium. Again, on p. 397 of the Pharmacopœia, I find an account of "Syrup of rhubarb," from which it is

seen that the finished product contains in addition to syrup and rhubarb four per cent. as much spirit of cinnamon and ten per cent. as much potassium carbonate as of the preparation of rhubarb employed. Once more, on p. 427 of the same book there is an account of "Tincture of rhubarb," from which we learn that this preparation is made not only from alcohol and rhubarb, but contains twenty per cent. as much cardamon as of rhubarb. I might give many other similar illustrations from the United States Pharmacopœia and from numerous other authoritative works on pharmacy and chemistry, but the above are sufficient *to show that descriptive names do* not, of necessity, in any way refer to the minor constituents of a compound, especially if they are introduced with the purpose of aiding the action of the chief substances.

It is stipulated by complainant's counsel that the publications which have been referred to by Prof. Haines are authentic, and were published at the dates designated by him with respect to them.

Q. 15. What have you to say concerning the designations of medicinal preparations in the United States Pharmacopœia with relation to their descriptive character or the contrary?

101 A. With very few exceptions, the names given by the United States Pharmacopœia are of a descriptive character.

Cross-examination by Mr. BROWN:

X Q. 16. Do you find in the United States Pharmacopœia and Dispensatory either the name "pancreopepsine" or "pancropepsin" applied to any medicinal preparation?

A. I do not.

X Q. 17. Do you find either of these names in any medical dictionary with which you are acquainted, or any works of materia medica?

A. I have not found them in any medical dictionary or work on materia medica that I have consulted.

X Q. 18. Did you ever find or observe either the word "pancreo" or "pancro" in any medical or pharmaceutical text-book, or in any recognized dictionary, whether medical or otherwise?

Objected to as immaterial.

A. I cannot state with certainty whether on any occasion I have ever seen the word "pancreo" or "pancro" in a medical or pharmaceutical text-book, or any recognized dictionary. I may say, however, that as far as I now remember I have not.

Deposition of witness not concluded, but adjourned subject to further notice.

MONDAY, *November* 28, 1898—2 o'clock p. m.

By agreement of counsel, met pursuant to adjournment.
Present: Same as before.

Cross-examination by Mr. BROWN continued:

X Q. 19. You have testified that the substances pancreatin and pepsin were known prior to 1876. Were the words "pancreo-
102 pepsine" and "pancro-pepsin" both or either known to you prior to 1876?

By Mr. DYRENFORTH: Objected to as immaterial. The contention in behalf of the defense is not that either of these specific forms was used before the year 1876, but that they are both definitely suggestive of the presence of pancreatin and pepsin.

By Mr. BROWN: Exception is taken to the above argument, as not made necessary at this time by the question, and counsel for complainant suggests that the question is necessary, because the direct examination made it appear that this suit was to determine the origin of pancreatin and pepsin, rather than the words referred to in the bill of complaint and the complainant's evidence. Counsel for complainant desires to make it clear by the cross-examination what the issue is in the suit, and not to have it obscured by immaterial evidence.

By Mr. DYRENFORTH: If it will save cross-examination upon a matter which I regard as wholly immaterial, I am perfectly willing to admit on the record that the specific forms "pancreopepsine" and "pancro-pepsin" were not employed before the year 1876.

Counsel for complainant is willing to receive the admission suggested.

By Mr. DYRENFORTH: I have no information whatever that the specific forms referred to were in use before the year 1876, and I therefore assume that they were not, and it may be taken as admitted that they were not.

By Mr. BROWN: In view of the above admission of counsel, question is withdrawn.

X Q. 20. In one of your answers in direct examination you gave as an example the word "oleomargarine," and stated that it
103 was composed of oleine and margarine. Do I understand from that that the word "oleomargarine" is, in your judgment, a descriptive term?

A. The name, in my opinion, is descriptive, as it indicates the chief substances that are present in the substance or were supposed to be present at the time it was first made.

X Q. 21. There is a substance known as "cottolene," the chief constituent of which is cotton-seed oil. Following the same line of reasoning as you have applied to the other words you have named, is cottolene descriptive?

By Mr. DYRENFORTH: Objected to as immaterial.

A. I should regard it as either not at all descriptive or, at most,

only very remotely so. In the first place I know of no such word as "olene;" it is evidently chiefly a fanciful combination of letters, and although it might possibly recall the word "oleine," it would by no means necessarily do so. In the second place the syllable "cott," while it might be an abbreviation for cotton, could scarcely, I think, be used legitimately as an abbreviation descriptive of cotton seed. I am of the opinion, therefore, as before stated, that the word "cottolene," if descriptive at all, is only remotely so.

X Q. 22. You say in the above answer that you know of no such word as "olene;" but you know, do you not, of just this word with one letter interposed, making "oleine"?

A. I have already stated in my last answer that there is a word "oleine." But it should be noted that while this differs from "olene" only by an "i," the two are not pronounced alike, the first being a word of three and the latter one of two syllables. Both to the eye and ear, therefore, the two words have an important difference.

X Q. 23. Are you acquainted with any word from which "olene" could be derived as closely resembling it as "oleine"?

A. I do not think of any at present.

104 X Q. 24. The "important difference" to the eye you just mention between these two words just named resides in the single letter "i," does it not?

A. The difference between the two words resides in the single letter "i," and the reason why I spoke of this as an important difference in this connection is that it is a principle of nomenclature that when two words are united to produce a compound descriptive word the last name is used unchanged, the first name only being modified in its form. When, therefore, I find a compound word that is supposed to be descriptive I am justified in supposing that the latter part of it is unchanged, and if I am told that a letter has been dropped I should regard it as an important matter, since it is at variance with the recognized rules of descriptive nomenclature.

X Q. 25. Can you point to any work or publication of authority where the rule of nomenclature you have just announced is set forth?

A. Although I cannot at this moment do so, I am convinced that I could find this principle of nomenclature stated in authoritative works. That it is a well-recognized principle of nomenclature I have already shown by reference to two of our most important works on chemistry, namely, Watts' Dictionary of Chemistry and Gmelin's Hand-book of Chemistry (the latter, in spite of its name, being an extensive work of upwards of a dozen volumes). In both of these, and in a large number of other authoritative works on chemistry, the formation of compound descriptive names following the principle I have stated is frequently illustrated.

X Q. 26. Is the difference to the eye between the word "oleine" and the word "olene" greater than the difference between this form of word and the word "oleo"?

105 A. Considered abstractly the difference is not greater, but when considered in connection with a compound descriptive name the difference is overwhelmingly greater, for it is a well-recog-

nized principle of descriptive nomenclature that we may change the termination of the first word in a compound name to "o," but the last word remains unchanged. Hence the changing of "oleine" to "oleo" in the word "oleomargarine" is in accordance with usage, but the conversion of "oleine" into "olene," which is assumed to have been done in the word "cottolene," has no justification in the principles of nomenclature.

X Q. 27. Apart from your assumed rule of nomenclature—which rule I do not admit—there is a greater difference to the eye between "oleine" and "oleo" than between "oleine" and "olene," is there not?

A. Abstractly considered, the difference is greater.

X Q. 28. And the difference is greater to the ear also, apart from the assumed rule of nomenclature, is it not?

A. Abstractly considered, the difference to the ear I should say is about equally great; "oleine" and "oleo" both containing three syllables appeal to the ear, on this account, as more nearly similar than "oleine" and "olene," which contain a different number of syllables, and this fully makes up for the somewhat greater similarity in the sound, in other respects, of the last two words.

X Q. 29. Is the difference to the eye between the words "oleine" and "olene" greater than is the difference between the words "pancreo" and "pancreatin"? I mean now apart from your assumed rule of nomenclature.

A. Abstractly considered, and apart, therefore, from the well-established principle of nomenclature which I have stated, the difference to the eye between "oleine" and "olene" is not as great as between "pancreo" and "pancreatin."

106 X Q. 30. I ask you the same question with regard to the difference to the ear in comparing these words.

A. Abstractly considered, I should say that there is a greater difference to the ear between "pancreo" and "pancreatin" than between "oleine" and "olene."

X Q. 31. Is the word "bromo-caffeine" descriptive, according to the rule which you have announced in your answer 3?

A. That depends somewhat upon the connection in which the word is used. The prefix "bromo" could be derived equally well from "bromine" or "bromide," and consequently "bromo-caffeine" might refer either to a combination of caffeine with bromine or to its mixture with a bromide. In pure chemistry the former would be the meaning that would be most likely to be attached to the word, but in pharmacy either interpretation would be equally correct. In pharmacy, consequently, the word "bromo-caffeine" could be only very broadly descriptive; it might refer to the compound of caffeine with either bromine or a bromide, and as the number of the latter is quite large it is clear that one could gain no positive information as to the exact nature of the substance from its name. On this account I should regard the word "bromo-caffeine," as used in commerce, as suggestive rather than descriptive; it might, perhaps, be said to be broadly descriptive, but certainly not narrowly so.

X Q. 32. What are the elements of nitric acid?

Objected to as incompetent and immaterial.

A. Hydrogen, nitrogen and oxygen.

X Q. 33. Nitro-glycerine, as a term, fails to indicate descriptively whether it is composed in part of nitrogen or nitric acid, does it not?

A. The word nitro-glycerine, abstractly considered, does not indicate descriptively whether it is a compound of nitrogen alone
107 or of some derivative of nitric acid; the name was given to the compound because it was made by the action of nitric acid on glycerine, and it is, therefore, descriptive of the substances used in making it.

X Q. 34. Then, as a name, nitro-glycerine stands on the same plane as bromo-caffeine as being suggestive rather than descriptive, does it not? I am speaking now apart from your statement that the name was given for certain reasons contained in the last few lines of your last answer.

A. As a mere name and entirely apart from its history and preparation, the word nitro-glycerine, abstractly speaking, is on somewhat the same plane as bromo-caffeine; both in pure chemistry refer to somewhat definite compounds, but there is this important difference between the two: nitro-glycerine was introduced into the arts as a scientific substance under the descriptive name which was originally given it, while the bromo-caffeine of pure chemistry was, I believe, never introduced into the commerce of the world, and therefore its name, which was at first narrowly descriptive, was left open for use in trade in the generic way I have before spoken of.

X Q. 35. The term nitro-benzene, applying the same reasoning that you did to bromo-caffeine in your previous answer, is descriptive or suggestive, and why?

A. The term nitro-benzene of pure chemistry is descriptive and refers to a substance produced by the action of nitric acid on benzene. This compound was introduced into the arts under its descriptive chemical name, and the latter, therefore, is now a narrowly descriptive word. Were the name, however, to be introduced today for the first time into pharmacy and trade generally in connection with some proprietary article, it would then be on a level with bromo-caffeine and would be broadly descriptive of a compound of benzene with nitric acid or a nitrate.

Adjourned to Thursday, November 31, at 2 o'clock p. m.

108 THURSDAY, *December* 1, 1898—2 p. m.

Met pursuant to adjournment.

Present: Same as before.

Cross-examination of WALTER S. HAINES continued:

X Q. 36. In the term "nitro-benzene," does the prefix "nitro" refer to a nitrate or to nitrogen, or what, and why?

A. Nitro-benzene is made by the action of nitric acid on benzene, and the prefix "nitro" recalls that fact. The compound contains

the radical NO_2, which is often known as the nitric-acid radical; the chemical composition, therefore, also justifies the name.

X Q. 37. How do you know nitro-benzene is made by the action of nitric acid on benzene?

A. Both by the statement of many authoritative works on chemistry and also from my own personal experience, as I have frequently prepared the substance.

X Q. 38. If you had never been told so by authorities and had never ascertained the fact by experiment, you would not have known whether the term "nitro-benzene" referred to a combination of benzene and nitric acid or referred to a combination of benzene with nitrogen, would you?

A. If I were asked this question from the standpoint of scientific chemistry, I should say that even without any previous knowledge I should feel confident that nitro-benzene was a compound produced by the action of nitric acid on benzene, for the prefix "nitro" in pure chemistry refers to compounds that are produced by the action of nitric acid; compounds with nitrogen alone are generally indicated by the prefix "azo."

X Q. 39. Can you cite any authority for this statement you have made in your last answer? I mean where such a rule is announced.

109 A. I can cite the best of all authority, namely, scientific usage. If any reliable work on chemistry is referred to the correctness of my statement will be seen; "nitro-benzene," "nitro-glycerine," "nitro-cellulin," and many other similar names, will be found to be applied to bodies produced by the action of nitric acid, while "di-azo-benzene," "azo-colors" and other similar words containing the prefix "azo" will be found to refer to compounds with nitrogen. Usage governs nomenclature as it does other forms of language, and a consultation with authoritative works on chemistry as surely gives us the rules of nomenclature as a specific statement would. I have no doubt, however, that the very rule I have laid down could be found in chemical publications if search were made for it. I cannot now refer to any definite page and volume for an explicit statement in regard to this matter; neither can I state where we can find the rule for the construction of such words as "Anglo-American," "Franco-Prussian," "Austro-Hungary," etc. We all of us know by experience that a rule governs the formation of such compound words as these latter, yet it would be difficult, and perhaps impossible, to put one's finger on a specific printed statement to that effect.

Answer objected to as evasive.

By Mr. DYRENFORTH: Perhaps complainant's counsel intended to say objected to as irresponsive to the question in his judgment. I do not doubt that he intends to be perfectly courteous to the witness, and giving the accurate meaning to the word, it is scarcely courteous to tax the witness with evasiveness, since this imports an intention on the part of the witness not to be responsive.

By Mr. BROWN: I will let the court judge as to the propriety of the objection to the answer.

X Q. 40. Will you please state, if you can, any reliable scientific publication where the rule is announced that the prefix
110 "nitro" in pure chemistry refers to compounds produced by the action of nitric acid, and the prefix "azo" indicates compounds with nitrogen alone?

A. As I have said before, I cannot now refer to a definite page in a scientific publication in which the above rule is laid down. Having no idea that this question would be asked me, I did not look the subject up, but I have no doubt that a statement of this principle of nomenclature could be found in scientific print. That my assertion concerning the use of the prefixes "nitro" and "azo" is correct is abundantly demonstrated by numerous works on chemistry in their individual articles relating to compounds whose names have these prefixes.

Answer objected to as evasive.

X Q. 41. I did not ask you as to the page where you would find the rule announced which you suggest, but as to the work or publication. Will you please answer this question, if you can?

A. As I have said before, having no idea that this question would be asked me, I did not look it up, and I am unable, therefore, to cite a definite work. I do not wish to be understood by this as saying that statements in regard to the subject could not be found; I mean merely that I have made no effort to find such statement, and naturally, therefore, I can cite no authority off-hand. There are countless facts in science about which there is not the least controversy, and yet concerning which I could not, without preparation, cite with certainty any definite authority.

X Q. 42. Does this rule which you assume in relation to the prefix "nitro" apply to any other acid by a similar and corresponding prefix?

A. It does, and we have many illustrations of it, such, for instance, as "sulpho-carbolic acid," a substance made by the
111 action of sulphuric acid on carbolic acid; "glycero-phosphoric acid," a compound made by the union of phosphoric acid and glycerine; "phospho-tungstic acid," a compound of phosphoric and tungstic acids, and numerous others of a like character.

X Q. 43. Is there any reason why that same rule should not apply to all acids?

A. The same rule does apply to other acids. There may naturally be exceptions to the rule, although I have not any in mind at present.

X Q. 44. The illustrations you gave in A. 42 all relate to a combination of two acids which, of course, would require a combination of the two words describing the acids or abbreviations thereof, and therefore would not seem to serve to illustrate the rule which you assume. Can you give illustrations with the same acids in combination with other substances than acids where the assumed rule is followed?

A. Two of the illustrations I gave in A. 42 are of compounds of an acid with substances that are not acids. One of these is the union of phosphoric acid with glycerine, the latter, as is well known,

not being an acid at all, but a perfectly neutral body. The other illustration given in A. 42 in which an acid combines with a non-acid is the union of sulphuric acid with carbolic acid, the latter, in spite of its usual name, not being an acid, but is, like glycerine, a perfectly neutral substance; it received the name carbolic acid through a misunderstanding, in its early history, of its true character and composition, and today in exact science we speak of it as "phenol." I have already answered, therefore, the latter part of the question, but if additional illustrations are needed I might mention "sulpho-vinic acid," a substance produced by the action of sulphuric acid on ordinary vinous alcohol, and "glycero-sulphuric acid," a compound of glycerine with sulphuric acid.

112 X Q. 45. Then, as I suppose, the term "glycero-phosphoric acid" is a departure from your assumed rule, because if the rule was followed the term would be "phospho-glyceric acid" in that the rule makes the prefix an abbreviation of the acid. Is not this so?

A. It is true that as a rule when a substance is produced by the action of an acid upon a neutral body the name given it has a prefix indicating the acid used, and in the above cases the general rule is sometimes followed, and the name, for instance "phospho-glyceric acid," is occasionally employed instead of glycerio-phosphoric acid."

X Q. 46. If your rule is true, what name would be given a combination of citric acid and boral or boro?

Objected to as incompetent.

A. I know of no such substance as "boral" or "boro," and am unable, therefore, to answer the question.

X Q. 47. I think you will find the substance boral recognized in all reliable medical works as a synonym for borax or compound of borax called aluminum boro-tartrate. Please answer the above question with this understanding.

Objected to as incompetent.

A. I wish to say, first of all, that while the word "boral" may possibly be a synonym for borax I am sure that it is not commonly used in that way. I would also say that aluminum boro-tartrate is not a compound of borax, although it may be an indirect derivative of it, and finally, I would say that "boral" is certainly not recognized in all reliable medical works, in fact, I doubt whether if used at all in standard medical publications it would be found except very infrequently.

Assuming, however, that there is a substance known scientifically as "boral," I should call its combination with citric acid "boro-citric acid," if it were an acid substance, and if it were not I should call it "citro-boral."

113 X Q. 48. Distinguish between a sulphide and a sulphate?

By Mr. DYRENFORTH: I object to the question as incompetent, immaterial and irrelevant, and I protest against encumbering the record with matters wholly foreign to the issue.

A. A sulphide is a combination of a metal or some other electro-

positive radical with sulphur; a sulphate, on the other hand, is a compound of a metal or some other electro-positive radical with the radical of sulphuric acid.

X Q. 49. Bromo-caffeine is not an illustration of the rule which you have assumed as to a prefix being used in the case of acids, is it?

A. It is an illustration of the formation of compound words to indicate the substances used in making a preparation; if an acid is one of the materials employed we abbreviate the name of the acid, but if bromine is the substance used we abbreviate it in an analogous manner. The true bromo-caffeine of pure chemistry is prepared from bromine and caffeine, hence the name is an illustration of the rule for naming descriptively such compound substances.

Adjourned to Friday, December 2, 1898, at 2 o'clock p. m.

FRIDAY, *December* 2, 1898—2 o'clock p. m.

Met pursuant to adjournment.

Present: Same as before.

Cross-examination by Mr. BROWN continued:

X Q. 50. Do you mean by the last clause of your answer 49 that in your opinion the term "bromo-caffeine" is descriptive rather than suggestive?

A. The name "bromo-caffeine" in pure chemistry is descriptive, but, as I have before stated, in answer to X Q. 31, in pharmacy the word is so broadly descriptive as to be rather suggestive than descriptive.

114 X Q. 51. Then in pure chemistry the name "bromo-caffeine" being as you say descriptive of bromine and caffeine, is not in accordance with the rule which you announce to the effect that "nitro" was descriptive of nitric acid rather than nitrogen, and that rule was to be applied as one of general usage to the other acids of the arts?

A. It is quite true that "nitro" is often used in compound words to indicate substances produced by the action of nitric acid on certain other bodies, and it is also true that the prefixes "sulpho," "boro," etc., are indicative in an analogous manner of compounds produced by sulphuric acid, boric acid, etc., but this fact does not prevent the use of a similar system of nomenclature in connection with bodies produced from non-acids. Bromo-caffeine is an illustration of this fact; in pure chemistry this substance is produced by the action of bromine upon caffeine, and the name "bromo-caffeine" was given to it on this account. The word "bromo-caffeine" is an illustration of the broad principle which I have already laid down that many bodies are designated by names indicating the substances used in preparing them, the termination of the first word being changed to "o."

X Q. 52. I do not think your answer is at all responsive to my last question. Please read such question and see if you cannot give a more direct answer.

A. If the intent of the question is to ask why the prefix "bromo" in "bromo-caffeine" does not refer to bromic acid rather than bromine, I would answer that the substance in question in pure chemistry is not and could not be produced by the action of bromic acid, and any chemist would know this fact. The substance produced by combining bromic acid with caffeine would be bromate of caffeine; caffeine being a base, when brought in contact with bromic acid, the two unite to produce a salt, and for substances of this kind
115 we have another principle of nomenclature, giving us in this case the name already stated, bromate of caffeine. Since, then, there is another way of designating a compound produced by the action of bromic acid on caffeine, and this method is, moreover, imperative in this connection, it would be improper to speak of a compound formed from caffeine and bromic acid as "bromo-caffeine."

The use of the prefix "bromo" to indicate bromine is in accordance with well-established usage, which, after all, is what governs nomenclature; it differs, it is true, from the prefixes "nitro," "boro," etc., in that it refers to an element rather than a compound, and it may consequently be looked upon, if we wish, as an exception to the rule that applies to these other prefixes.

X Q. 53. If a substance should be produced for the first time, and given the name "bromo-caffeine," which name itself was equally new at the time of its adoption, could you state, either as a chemist or a pharmacist, whether that name referred to a substance composed of bromine and caffeine, or a substance composed of bromic acid in combination with caffeine?

Objected to as irrelevant, in view of previous answers in the course of this deposition. Moreover, the question is objected to as indefinite, since it omits to state whether or not the designation is given truthfully.

By Mr. BROWN: The objection is excepted to as "coaching."

A. Assuming that the name "bromo-caffeine," under the conditions of the question, was not deceptive and was, therefore, correctly descriptive of the compound to which it was applied, I should say at once if I considered it from the standpoint of pure chemistry, that the substance referred to was a compound of bromine and
116 caffeine, and not of bromic acid and caffeine. it were the latter, it would be called "bromate of caffeine" in the same manner as the compound of quinine with sulphuric acid is known as sulphate of quinine and the compound of strychnine with nitric acid is called nitrate of strychnine. All of these bodies, caffeine, quinine and strychnine, are bases, and when brought into contact with acids they produce salts, and the latter are given names to indicate this fact. Since I should know, then, that the assumed new substance "bromo-caffeine" could not be a compound of caffeine and bromic acid, I should understand from the name that it was a body produced from bromine.

X Q. 54. Bromate of caffeine, as you term it, is produced from

bromine and caffeine, notwithstanding the presence of the acid, is it not?

A. Bromate of caffeine is not produced by combining caffeine with bromine, but by uniting it with bromic acid. Just as lime with sulphuric acid produces sulphate of lime, as potash with nitric acid makes nitrate of potash, so caffeine, which is a basic substance like lime and potash, when united to bromic acid, produces bromate of caffeine. Bromine and caffeine do not produce bromate of caffeine any more than sulphur and lime produce sulphate of lime, or nitrogen and potash produce nitrate of potash.

X Q. 55. Of course, but does not bromic acid contain bromine, so that its combination with caffeine thereby involves also the combination of the bromine in it with such substance?

A. It is true that bromic acid contains bromine as one of its constituents, but bromic acid is no more bromine than sulphuric acid is sulphur. Bromic acid, of course, when it unites with a base like caffeine, for instance, carries bromine into the compound, just as sulphuric acid when it combines with a base carries sulphur
117 into the resulting salt, but in both instances it is not the element bromine nor the element sulphur that enters into the combination with the base, but the acid as a whole.

X Q. 56. When a bromide unites with caffeine, is it the element bromine that unites?

Objected to as irrelevant and immaterial.

A. The only bromide that I know of that unites chemically with caffeine is the bromide of hydrogen. When this body combines chemically with caffeine, it is not definitely known what reaction occurs; some believe that the two substances combine unchanged, but the preponderance of opinion is that there is a rearrangement of the atoms by which a compound of bromine with a derivative of caffeine is produced.

X Q. 57. Is it not a fact that the term "bromo-caffeine" refers to a substance composed of a bromide and caffeine and not bromine and caffeine, as you have heretofore stated?

Same objection.

A. In my answers to the preceding questions in regard to bromo-caffeine I have assumed that the bromo-caffeine of pure chemistry was referred to, and have so stated. In trade, however, the name today is frequently applied to various proprietary substances whose exact composition I am not familiar with; I have been informed, however, that they generally contain caffeine or some one of its salts, chemically mixed, but not chemically combined with a bromide.

X Q. 58. You have just said that the preponderance of opinion is that there is a rearrangement of the atoms by which a compound of bromine with a derivative of caffeine is produced in the case of bromide of hydrogen. Is it not a fact then that the term "bromo-

caffeine" refers to a substance composed of a bromide and
118 caffeine chemically united as in the instance given by you, and not to bromine and caffeine, as you have heretofore stated?

Same objection.

A. When bromide of hydrogen (commonly spoken of as hydrobromic acid) is brought in contact with caffeine combination ensues, and, as I have before stated, it is generally supposed that there is a rearrangement of atoms by which a derivative of caffeine is produced, and the bromine then unites with this new substance. But the derivative of caffeine is not caffeine itself, and consequently the bromine is not in combination with caffeine, but with a new body. The term "bromo-caffeine," therefore, would manifestly be inapplicable to this compound if considered from the standpoint of pure chemistry, although in trade it might be permissible.

X Q. 59. You have said a good deal about bromo-caffeine in pure chemistry. Is there any such term or name in pure chemistry recognized by any reliable work, and if so, state the work or works?

Same objection.

A. There is, if I remember correctly, a compound produced by the action of bromine upon caffeine, to which the term "bromo-caffeine" would be applied in pure chemistry. An entirely analogous substance produced by the action of the sister element chlorine upon caffeine is well known and is called "chloro-caffeine." I believe that by referring to the encyclopedic works on chemistry both of these substances would be found mentioned.

X Q. 60. Never mind about the so-called analogous substances, but please, at the next sitting, refer us definitely to some reliable authority where the term "bromo-caffeine" is used in pure chemistry. Will you do it?

Objected to for the reasons that have been stated before as
119 to this line of questions, namely, that all questions pertaining to the name "bromo-caffeine" and compounds into which bromine and caffeine enter are irrelevant and immaterial to the issues of this case.

A. I shall be glad to look up the question, but owing to many other engagements I shall be unable to do it for a number of days. If our next sitting occurs in the quite near future I fear I shall not be able to report my results at that time.

X Q. 61. This is Friday, and our next sitting, as agreed upon, is Monday afternoon, is it not?

A. Monday afternoon has been suggested for our next meeting, but I do not know that it has been definitely decided upon.

X Q. 62. Will you report upon this matter on Monday afternoon?

A. I am sorry to say that I probably shall not be able to at that time, owing, as before stated, to other engagements.

X Q. 63. I understand you to express the opinion that from the

standpoint of pharmacy the term "bromo-caffeine" is suggestive and not properly descriptive. Is that correct?

Same objection.

A. As I have before explained, the term "bromo-caffeine" in pharmacy might refer either to a chemical compound of bromine with caffeine or to a mechanical mixture of a bromide with caffeine. Since the number of bromides that might be used in such a mechanical mixture is considerable, and since each bromide has individual properties of its own, it is evident that quite a number of different mixtures might be made having somewhat varying properties, to all of which the name "bromo-caffeine" might be applied in pharmacy. On this account, as I have said before, the term "bromo-caffeine" is only broadly descriptive, or possibly only suggestive.

120 X Q. 64. And in each of these mechanical mixtures of a bromide with caffeine bromine, as a constituent part of the bromide, must enter, must it not?

A. Bromine is a constituent part of all bromides and in a state of combination it would be found therefore in all such mechanical mixtures as those referred to in the question.

X Q. 65. Of what is gastric juice composed?

A. Gastric juice is a very complex substance, if we consider everything that is or may be present in it, but, under ordinary conditions, it contains, as its chief active constituents, pepsin and hydrochloric acid.

X Q. 66. Are those all the recognized ingredients of the gastric juice; if not, state the others?

Objected to as immaterial.

A. The chief other substances are a milk-curdling ferment or rennet, various salts, such as chlorides, sulphates and phosphates, coloring matter and odorous principles. Other acids than hydrochloric, especially lactic acid, are also sometimes present.

X Q. 67. Please state of what the milk-curdling ferment is composed.

Same objection.

A. That is unknown, as it has never yet been isolated in a pure condition, and therefore an exact analysis of it has been impossible. It is believed, however, to contain, like all the other organic constituents of the body, carbon, hydrogen and oxygen, and, most likely, nitrogen also.

X Q. 68. Is there any other digestive agent found in the stomach?

Same objection.

A. Under ordinary circumstances we find a certain amount of the ferment of the saliva, known as ptyalin. This is swallowed
121 from the mouth and during the early periods of digestion it renders starch soluble, and therefore may be said to be one of the digestive agents at work in the stomach. It goes without saying,

however, that it is not a real part of the gastric juice, being secreted outside of the stomach.

X Q. 69. Has the human body an organ called the pancreas, and, if so, what is its function?

A. There is an organ in the human body called the pancreas, and its function is the production of a digestive agent known as the pancreatic juice, a fluid which owes its digestive power to the presence in it of a complex substance called pancreatin.

Adjourned to Monday, Dec. 5, 1898, at 2 o'clock p. m.

CHICAGO, *Dec.* 5, 1898.

Met pursuant to adjournment.
Present as before.

Cross-examination of Dr. WALTER S. HAINES continued:

X Q. 70. Have you, since the last examination, made a search and found the term bromo-caffeine recognized in any reliable work?

A. Since our last sitting I have taken such time as I had at liberty and have found the word "bromo-caffeine" in a thoroughly reliable work on chemistry, namely, Watts' Dictionary of Chemistry, first supplement, bearing the date 1872. On page 383 of this work I find the following:

"*Bromo-caffeine.*—Caffeine forms with bromine a brick-red pulp, which on further addition of bromine dissolves in the hydrobromic acid produced; and on expelling the excess of this acid and adding ammonia, bromo-caffeine, $C_8H_9BrN_4O_2$, is obtained as a flocculent precipitate, whilst a crystal-izable substance not yet examined remains in solution."

122 The above quotation from one of our best authorities on chemistry demonstrates that "bromo-caffeine" has been known at least, in pure science, for upwards of twenty-six years, as a substance produced by the action of bromine on caffeine.

X Q. 71. In your answer 53 you made the following statement: "All these bodies, caffeine, quinine and strychnine, are bases, and when brought into contact with acids they produce salts, and the latter are given names to indicate this fact. Since I should know, then, that the assumed new substance bromo-caffeine could not be a compound of caffeine and bromic acid, I should understand from the name that it was a body produced from bromine." Do you still regard that statement as correct, or does the authority on chemistry which you have just cited contradict it?

A. I still regard that statement as correct, and I do not see how in any way the authority which I have just cited contradicts it. It is true that I used the expression "the assumed new substance 'bromo-caffeine,'" but this was necessitated by the conditions of the question, which assumed that the substance under consideration was a new product.

If there seems to be in any way, possibly for lack of full information in regard to the matter, a contradiction between my answer to cross-question 53 and the authority I have quoted, I should be glad

to know what it is in order that I may explain it. As a matter of fact, there is no disparity between the two nor do I quite understand how one could be thought to exist.

By Mr. DYRENFORTH: I object to the present line of examination as utterly irrelevant to any of the issues in this case, and I protest against encumbering the record with such matter.

123 X Q. 72. In accordance with the principle laid down in your answers 52 and 53, caffeine, being a base, when subjected to the action of nitric acid would produce a substance which it would be improper to call nitro-caffeine and which should be called caffeine nitrate. Is not this correct?

A. Upon treating caffeine with nitric acid the substance that is produced depends largely upon several factors, such as the relative amount of nitric acid used, the concentration of the *the* acid, and the temperature employed. If the nitric acid is mixed with the caffeine only in sufficient quantity to saturate the basic properties of the latter, caffeine nitrate (known also as nitrate of caffeine) is produced; but if the nitric acid is used in larger proportion, and especially if it is concentrated, a more complex reaction ensues, and nitro-caffeine is obtained. Whether, therefore, the compound produced by the action of nitric acid on caffeine should be called nitrate of caffeine or nitro-caffeine depends upon the condition under which the two chemicals are mixed.

X Q. 73. Then the prefixes "bromo" and "nitro" to the word "caffeine" may refer to bromic acid and nitric acid, may they not?

By Mr. DYRENFORTH: Objected to as immaterial and as fully answered by this witness heretofore.

A. The prefix "nitro," when applied to the word "caffeine" suggests the fact that nitric acid is used in preparing the compound; bromic acid, however, has no such dual action upon caffeine or other organic substances as nitric acid has, and therefore bromo-caffeine would not result from its action. The prefix "bromo," consequently, does not recall bromic acid, as the latter is not used in preparing the compound.

X Q. 74. In Watts' Dictionary of Chemistry, which, as you say, is an eminently reliable authority, you find the names "bromo-
124 caffeine" and "nitro-caffeine" used as designations, but you do not find in said dictionary any recognition of the terms which you have heretofore indicated, such as caffeine bromate, caffeine nitrate, or bromate of caffeine, or nitrate of caffeine. Is not this correct?

A. It is true that in the volume of Watts' Dictionary before us the terms "caffeine bromate" and "caffeine nitrate" or their equivalent terms "bromate of caffeine" and "nitrate of caffeine" do not occur, but it should be borne in mind that the volume we have with us is only a supplement and not the main dictionary itself; moreover, no dictionary of chemistry, however large or however reliable, does or can enumerate all of the compounds known in the science.

X Q. 75. You know there is recognized a vegetable as well as an animal pepsin, do you?

Objected to as immaterial.

A. We have a digestive agent obtained from the vegetable kingdom which has some of the properties of pepsin, but I have never heard it called pepsin nor should I consider it proper to do so.

X Q. 76. Pancreatic juice is, as you have stated, derived from the pancreas, and it is composed of trypsin, steapsin and amylolitic ferment. Is not this correct?

Objected to as immaterial.

A. It is scarcely correct to state the composition of the pancreatic juice in this way; it is true that there exist in the fluid three digestive ferments, trypsin, steapsin and amylopsin, and that upon these the activity of the fluid depends, but there are other constituents present, such as various salts and organic compounds other than these ferments. As I have said before, however, it is correct that the pancreatic juice contains the three ferments mentioned in the question, and that they are the valuable agents in the fluid.

125 X Q. 77. Pancreatin is an extract in the shape of a powder and the name has been variously used for many different preparations from this pancreatic "juice"?

A. The term "pancreatin" in its strict acceptation refers only to the active constituents of the pancreatic juice, but as ordinarily employed, the name refers to substances containing, in addition to the active ferments, various other organic bodies which are accidentally present. On account of the more or less perfect way in which pancreatin is obtained we have naturally substances going under this name of greater or less digestive power and containing more or less of foreign substances. But, however it is made, commercial pancreatin owes its activity to the presence of true pancreatin (that is, a mixture of the digestive ferments), and consequently all commercial pancreatins, if of value, should have this fundamental point in common, that they all depend for their virtues on the presence of the same digestive ferments.

X Q. 79. "The term pancreatin has been variously used for many different preparations from the pancreatic gland, and has long been popularly employed for the purpose of distinguishing preparations more or less the nature of extracts made from the gland." This definition you find in the United States Dispensatory, seventeenth edition, do you not?

A. I find the above language in the book referred to, but I should regard it rather as a statement than as a definition. I might say now, as I have before in this deposition, that pancreatin is the active constituent of both the pancreatic juice and the gland, the pancreas, from which it flows, and consequently pancreatin may be derived from either of these sources, both being practically the same.

X Q. 80. United States Dispensatory, the book from which I took

the above statement, is recognized as reliable authority, it is not?

126 A. It is, but like all good authorities, it may make mistakes.

X Q. 81. The same reliable authority states: "The pancreatin of the U. S. Pharmacopœia is composed of all these ferments with more or less extraneous matter. It is officially described as a yellowish white, or greyish and amorphous powder, odorless, or having a faint peculiar not unpleasant odor, and a somewhat meatlike taste." You find this statement in the book referred to, do you not?

A. I find the above statement in the United States Dispensatory; upon referring, however, to the United States Pharmacopœia, I find pancreatin spoken of in somewhat different terms, as far as the first part of the above quotation is concerned. The language of the Pharmacopœia is as follows:

"Pancreatin.—A mixture of the enzynes naturally existing in the pancreas of warm-blooded animals, usually obtained from the fresh pancreas of the hog."

Mr. BROWN: I object to so much of the above answer as follows the first clause thereof, before the semicolon, as volunteered and irresponsive, and ask the attention of the court to the disposition of the witness as manifested all through this cross-examination, and well illustrated in the above answer.

By Mr. DYRENFORTH: The objection of my irascible friend seems to indicate that he is averse to having the court fully informed.

Mr. BROWN: The attention of the court is asked to the improper and impertinent remark just made by counsel for defendant, which is not in the shape of an objection, but merely as an argument.

X Q. 82. The United States Pharmacopœia, which you used above was published according to its imprint in 1893, while the

127 United States Dispensatory, used by me as above referred to, is, according to its imprint, a later work. Is not this correct?

A. That is correct, but in order that there may be no misunderstanding I should add that there have been no changes made in the United States Pharmacopœia since 1890; it is revised every ten years and no oftener. Consequently, the United States Dispensatory, even though it bear the imprint 1894, must represent the same pharmacopœia as the official publication which I quoted from, printed in 1893.

X Q. 83. According to some authorities the term pancreatin is applied to only one of the ferments of which the pancreatic juice is composed, and according to other authorities it is applied to a different one of the ferments, and by still other authorities it is applied only to the amylolitic ferments. Is not this correct?

A. The term pancreatin, as far as I know, has always been applied by good authority to the active material present in the pancreatic juice and pancreas; no other use of the word, as far as I am informed, has ever been recognized. As I have before stated in this deposition, the term was first used in 1845 by Bauchardat and Sandras for the active part of the pancreatic juice and this use of

the word has been followed, when it has been appropriately applied, ever since. It is quite true, however, that when pancreatin was first discovered, and for a number of years afterward, all its digestive powers were not known and therefore were not spoken of in print; but they existed in the substance then just as now. Consequently, in years gone by, when writers have spoken of the starch-digesting powers of pancreatin and of its action in emulsifying fats and have said nothing of its ability to digest proteids, it was not due to the absence of the latter power in pancreatin, but to
128 ignorance concerning it. I do not understand, therefore, that the name pancreatin at any time was ever applied properly to anything but to the complete digestive substances present in pancreatic juice; its activity may not have been completely recognized, but this did not change its character.

X Q. 84. In Webster's International Dictionary, published in 1892, the following statements are made: "Pancreatin. One of the digestive ferments of the pancreatic juice; also a preparation containing such a ferment made from the pancreas of animals, and used in medicine as an aid to digestion.

"By some the term pancreatin is restricted to the amylolitic ferment of the pancreatic juice, but by others it is applied to trypsin, and by still others to steapsin." This is correctly quoted, is it not, from the book referred to?

A. The quotation is correct, but, as I have above explained, it lacks historical and I believe scientific accuracy.

X Q. 85. You know the eminent medical authority who wrote the medical portion of this dictionary?

A. I do not.

Adjourned until Wednesday, Dec. 7th, 1898.

DEC. 7TH, 1898.

Met pursuant to adjournment.
Parties present as before.

X Q. 86. In Student's Medical Dictionary, by Duane, you also find a similar statement to that just above made, which similar statement is as follows, referring to pancreatin: "A name given to various preparations of the pancreas, supposed to contain one or all of the ferments present in the juice." Do you not?

A. I do.

X Q. 87. In Practical Therapeutics, by Hare, on page 309 you find the following statement, do you not? "Pancreatin and
129 pancreatic extracts. Under these names a number of firms now selling extract called the pancreatic gland or juice, and the U. S. P. recognizes such a product under the name pancreatinum."

A. I do; and immediately after the above quotation I find the following: "It contains, or should contain, the four pancreatic ferments—trypsin, which digests proteids (meats, eggs, etc.); steapsin, which splits up and emulsifies the fats; amylopsin, which has diastatic power (that is, converts starch into sugar), and finally a milk-

curdling ferment." This language defines what pancreatin (or, as it is called in Latin, pancreatinum) is.

X Q. 88. And immediately after what you have quoted in the same work there occurs the following paragraph, which you did not see fit to quote: "A preparation equally useful with the commercial pancreatin may be made by the physician in the following manner: Take the pancreas of a pig, which has been killed about six hours after a full meal, the organ being therefore active, and after chopping it up fine add to it four times its weight of dilute alcohol and allow it to stand for twelve hours. Decant or filter off the alcohol, and give the filtrate in a dose of one to two drachms. (4.0–8.0) Or, better still, as follows: Wash and chop up fine a fresh pancreas, and allow the gland to soak in alcohol (absolute) 24 to 48 hours. After this squeeze out the alcohol and add to the gland ten times its weight of glycerine. This must stand forty-eight hours and then be filtered, and be used in doses of thirty drops (2.0) to each glass of milk." Do you not find this as stated?

By Mr. DYRENFORTH: I except to the expression used by counsel, "which you did not see fit to quote." This is not the first instance in the course of this deposition in which rancorous and discourteous expressions have been used by complainant's counsel. I see
130 no reason for conducting this cross-examination otherwise than with the courtesy which one gentleman ordinarily accords to another.

By Mr. BROWN: I will let the court determine whether this and all preceding questions have not been proper. The only discourteous expressions found in this deposition are those used by defendants' counsel, without warrant or justification, such as irascible, rancorous, in a seeming effort to pick a quarrel on the record and get the mind of the court away from the meat of the examination.

A. I do; and I may add that the preparations described are both merely solutions of pancreatin, this substance having been dissolved out from the pancreas by the action of the dilute alcohol in the first process, and by the glycerine in the second.

X Q. 89. I had supposed that pancreatin was derived from the pancreatic juice of the pancreas, and not that the pancreatic juice of the pancreas originated from the pancreatin. Am I wrong in this supposition?

A. Pancreatic juice is the fluid flowing from the pancreas; both contain pancreatin, and therefore the latter may be obtained from either the juice or the gland. It is quite true, consequently, that pancreatin may be derived from the pancreatic juice of the pancreas, and of course it is not proper to say that the pancreatic juice of the pancreas originates from the pancreatin.

X Q. 90. The authority above cited, viz., Hare, makes a distinction between the preparation which he recognizes under the name pancreatin or pancreatinum, which is the Latin for it, and the preparation which he says is equally useful with pancreatin, and which he described in quotation given above and which you called a solution, does it not?

131 A. He makes a distinction in form between pancreatin, which is a solid, already prepared from hog's pancreas for use by the physician, and the solutions of it which the physician may prepare for himself. As I have already stated, however, both solutions which Dr. Hare describes would owe their activity to pancreatin, and I do not see that the author in any way disputes this.

X Q. 91. Practical Therapeutics, above quoted, is a reliable authority, is it not?

A. It is on the subject of which it treats, viz., therapeutics, or the application of medicines in the treatment of diseases.

X Q. 92. Hare characterizes pancreatin as a dry powder, does he not, in his works?

A. He does.

X Q. 93. The solutions of alcohol and glycerine obtained from the pancreas in the manner stated by Hare may be properly termed pancreatic glycerole, may it not?

Objected to as immaterial.

A. The solution in glycerine might be called a glycerole, but the one in dilute alcohol could not appropriately receive that name.

X Q. 94. What would the one in dilute alcohol be termed?

A. It might be called a tincture, or if the alcohol were quite dilute, it might be called merely a solution.

X Q. 95. Are you acquainted with the substance named pancrene?

A. I am not.

X Q. 96. You do not know of any such substance recognized in books of pharmacy or medicine. Is that correct?

A. I do not now remember having seen the name.

X Q. 97. If there is such a substance, prefixes pancreo,
132 pancro, might well be derived from that name, might they not?

By Mr. DYRENFORTH: Objected to as incompetent, particularly unless it is made to appear that the designation was in use prior to the year 1876.

A. They might be.

X Q. 98. Are you acquainted with the medical term pancratium?

Same objection.

A. I am not acquainted with it as a medical term.

X Q. 99. As you are acquainted with that term, what is it?

A. I am not sure that I recognize the term at all, but it seems to me that either it or a similar word was used in connection with the ancient athletic sports.

X Q. 100. Are you acquainted with the word pancreatic as applied to medicines?

A. I am not.

X Q. 101. If such a word is to be found in medicine and such a word as pancratium is to be found in medicine, prefix pancro in pancro-pepsin may be properly derived from either of them, may it not?

By Mr. DYRENFORTH: Objected to as incompetent, immaterial and irrelevant. To be material, if at all, the question should be directed, not to the term pancro-pepsin of the defendant, but to the term pancreopepsine of the complainant.

Objection excepted to by Mr. Brown, as being an attempt to coach the witness under the guise of an objection.

By Mr. DYRENFORTH: The remark of Mr. Brown is excepted to as a piece of insolence.

Mr. BROWN: The attention of the court is called to this
133 constant interference with the proper right to make objections by impertinent interjections under guise of remarks by counsel, which has no proper place on this record.

A. That would depend upon whether these words refer to substances used in medicine and which could be compounded or mixed with pepsin for remedial use. In that case I should say that they might give rise to the prefix pancro, but not otherwise.

X Q. 102. Pancratium is, according to early medical dictionaries, like Hooper's Medical Dictionary of 1834 and Dunglison's Dictionary of 1865, revised in 1868, a word applied to medical plants called from its virtues in overcoming all obstructions or diseases. This plant was sometimes called scilla or scilla maritice. This plant or genus of plants of Linnæan was anciently used in a great many diseases and, as the authors say, was, amongst other things, esteemed as a stimulant to the stomach. I refer you to these books and ask you to state if, according to them, the statement I have made is not correct.

Objected to as incompetent, immaterial and irrelevant.

A. I scarcely think the quotations are accurately made or at least that the inferences drawn from the two books mentioned are at all justified by their language. Referring to Dunglison's Dictionary I find that "pancratium" is thus defined: "An athletic exercise with the Greeks. Applied also te a plant which was considereed all-powerful." Turning to Hooper's Dictionary I find the Greek origin of the word given and then simply "See scilla." Upon referring to scilla (which I may say is the Latin name for squills) I find medicinal properties of ordinary squill or scilla maritica discussed, and among other virtues attributed to it are those mentioned in the question. But there is nothing whatsoever to indicate that
134 this is the particular kind of squill referred to under pancratium, nor can I find under the heading "scilla" any back reference to pancratium; in fact, there is nothing at all to make one believe that there is the slightest connection between the two. It is to be observed that Dunglison's Dictionary, which is a later and more reliable work, in no way even suggests that pancratium is in the slightest degree allied to ordinary squill or in fact to any kind of squill, a fact which decidedly indicates that no reliance is to be placed on Hooper's Dictionary as far as this point is concerned. I do not see, therefore, upon carefully looking over both dictionaries referred to in the question, that there is anything in either of them to sug-

gest that pancratium is a medicament known and used today in the treatment of diseases of any character.

X Q. 103. The plant squill or scilla is well recognized as having a stimulating action upon the stomach, is it not?

Objected to as incompetent, immaterial and irrelevant.

A. It is quite likely that squill would have a stimulating effect on the stomach by reason of its irritant action, but personally I do not remember to have known of its actual use in stomach disorders. Its chief use in medicine is as an expectorant and diuretic.

X Q. 104. You know that reliable authority recognizes squill or scilla as a stimulant for the stomach, even to the extent of acting as an emetic or purgative, do you not?

A. I am perfectly well aware that when given in sufficient doses it may act as an emetic or as a purgative, and I think most medical authorities would make this statement.

X Q. 105. And you are also well aware that reliable au-
135 thorities recognize the stimulating action upon the stomach of squill or scilla, when given in doses too small to make it act as an emetic, are you not?

Same objection.

A. As I have stated before, I should have no doubt from my general knowledge of the character of squill that it acts as an irritant or stimulant to the stomach, and presumably writers on medicine state this fact.

X Q. 106. A species of pancratium, viz., pancratium maritimum, is described by Thomas' Medical Dictionary as late as 1894 as a plant which has "medical properties resembling those of squill," is it not?

Same objection.

A. Thomas' Medical Dictionary makes the statement quoted, but it does not indicate in what way it resembles squill in its medical properties—whether as an expectorant or as a diuretic or as an emetic or otherwise.

It should be noted that in Thomas' Dictionary both "pancratium" and "pancratium maritimum" are followed by an asterisk, which is used to indicate that the word "is either Latin or Latinized Greek," as is stated in the first of the book under the heading, "Explanation of signs, abbreviations, etc."

Counsel for the respective parties stipulate that Hooper's Medical Dictionary, Dunglison's Medical Dictionary and Thomas' Medical Dictionary were published on date indicated in such volumes, namely, respectively, Hooper 1834; Dunglison's 1868 and Thomas' 1894.

X Q. 107. These several books referred to, besides indicating the word pancratium as the name of a medicinal plant, also signify that the term has a derivative meaning of all-powerful, or an equivalent expression. Is not that correct?

Same objection.

136 A. Both Dunglison's and Hooper's Dictionaries state that the word is derived from two Greek words signifying all-conquering or all-strength. Thomas' Dictionary makes a similar statement.

By Mr. DYRENFORTH: Is complainant's counsel willing to state on the record whether or not he intends to argue that any physician or pharmacist of modern times might be led to suppose that the word "pancreopepsine" might be intended to signify all-powerful pepsin?

By Mr. BROWN: Complainant's counsel will make his argument at the proper time, and does not intend at this time to anticipate its nature by a statement not called for by a question or answer with the witness.

By Mr. DYRENFORTH: Then I suppose I am justified in assuming that complainant's counsel will not now state on the record whether or not he intends to argue that any modern physician or pharmacist might understand or suppose the term "pancreopepsine" to signify or imply a mixture or combination with pepsin of the "all-powerful" medicinal substance pancratium instead of pancreatin. Am I correct in this assumption, Mr. Brown?

By Mr. BROWN: I do not propose to argue my record now, or to testify on the record as to the nature of what my argument will be.

CHICAGO, *December* 10, 1898.

Met pursuant to adjournment.
Present as before.

X Q. 108. You are acquainted, are you not with the "neutrative element pancreatogen"?

A. I am not sure that I am acquainted with the substance under that name, but I should judge that the word refers to a body that produces pancreatin.

137 X Q. 109. Explain what you mean by "produces pancreatin" in that sense.

A. It is believed that pancreatin is produced from the pancreas by the intermediate formation of a body which is called a zymogen. This substance upon mere standing or upon the application of certain dilute chemicals is converted into pancreatin, and it is to this body that I referred in my preceding answer.

X Q. 110. The prefixes pancreo and pancro might be derived from pancreatogen, might they not?

A. It would scarcely be natural to do so, for we should have to elide not only a large part of the word, but, what is more important still, an essential part of the word. The termination "ogen" signifying, as it generally does in scientific words, "producer of," is a most important part of the word "pancreatogen," and therefore it should not be elided in constructing a compound word. I should not, therfore, consider it justifiable to derive the prefixes pancreo or pancro from pancreatogen.

X Q. 111. In other words, if these prefixes are derived from pancreatogen they would not be accurately descriptive; is that it?

A. They would not only be not accurately descriptive, but they would be misleading.

X Q. 112. What does the termination "atin" in the word "pancreatin" signify?

A. The termination "in" or "ine" is often used to indicate the active principle of a substance, consequently the ending "atin" in "pancreatin" denotes that the latter body is the active principle of the pancreas.

X Q. 113. What significance do you give to the "at" in "atin," or to the "t"?

A. The "a" in the "at" comes from the second "a" in the
138 word "pancreas," while the "t" is a mere changing for euphony's sake of the final "s" of "pancreas" to the pleasanter sounding letter "t."

X Q. 114. It would be much more natural to derive the prefixes pancreo and pancro from such words as "pancrene" and "pancreas" than from the long word "pancreatin," in which latter event you would have to "elide" "a large part of the word," would it not?

A. That would depend largely upon the connection in which the prefixes were used. In an anatomical term the prefixes undoubtedly would be more naturally derived from the name of the organ itself, but in connection with a digestive material it would be more natural to derive the prefix from the name of the digestive principle produced by the gland.

X Q. 115. That is, if you were endeavoring to make the term descriptive of the substances contained in the medicine you think it had better be said that these prefixes are derived from pancreatin, but if you wished a more or less fanciful or suggestive allusion, then these prefixes more naturally and properly come from "pancreas" or "pancrene." Is not this correct?

A. I scarcely think that is a correct presentation of the matter. As I have said before in this deposition, the prefixes "pancro" and "pancreo" could be derived either from "pancreatin" or "pancreas," and, in a connection with a digestive material, whichever of these words the prefixes were derived from would be equally descriptive of the digestive substance present in the glands.

X Q. 116. You have spoken of "pancreatin" as the active principle of the pancreas or the pancreatic juice, in which definition the authorities to which I have referred in this deposition do not seem to agree with you, but aside from that fact, are there no other digestive principles in the pancreatic juice emanating from the pancreas than what you term "pancreatin"?

139 A. The word "pancreatin" is used to indicate the active part of the pancreatic juice; that is to say, a mixture of all the digestive ferments secreted by the pancreas. There are, therefore, no other digestive principles in the pancreatic juice except those contained in "pancreatin."

X Q. 117. Please state all of the digestive principles contained in pancreatin, according to your opinion.

Objected to as immaterial.

A. They are trypsin, a proteid digestor; amylopsin, a starch digestor; and steapsin, a fat digestor. These three digestive ferments are all well recognized and all authorities admit their presence. Some writers also speak of the presence of another ferment—one that curdles milk.

X Q. 118. The United States Dispensatory in describing pancreatic juice instead of pancreatin gives the digestive ferments just as you have done. There appears, however, to exist in the pancreatic juice a property not indicated by you as existing in pancreatin according to United States Dispensatory, for that authority states that besides the digestive properties which you have named "the pancreatic juice has the power of emulsifying fats. This emulsifying property is possessed by an alkaline aqueous infusion of the gland, and is therefore present in properly prepared pancreatic extracts. It is independent of any of the ferments and is probably dependent on the presence of a peculiar form of casein or albumin." The pancreatic juice, therefore, has a substance which, as you have described pancreatin, is not to be found in pancreatin. Is not that correct?

Objected to as immaterial.

A. The statement of the United States Dispensatory is not correct. It is known that the property possessed by the pancreatic juice of emulsifying fats is dependent either entirely or chiefly upon
140 its steapsin, and if this ferment is removed from the juice the latter loses the emulsionizing power. The alkaline reaction of the juice and its somewhat viscid character possibly aid the action of the steapsin in producing emulsions, but it is the steapsin that is the active principle in this direction.

X Q. 119. If, on the other hand, the Dispensatory is right and you are wrong, then pancreatic juice contains a principle not a ferment which is not to be found in pancreatin as you find it. Is not this so?

Objected to as immaterial.

A. Yes.

X Q. 120. And in such case, if pancreopepsine was manufactured from the pancreatic juice, so as to preserve in it this emulsifying principle apart from the ferments, the name pancreopepsine might properly refer to the pancreatic juice and not to the pancreatin. Is not that so?

Same objection.

A. In the first place, I cannot admit that the emulsionizing power of the pancreatic juice is independent of its steapsin, and therefore is independent of the substances contained in pancreatin. But assuming that such is the case, or in other words, accepting the sup-

position of the question that the emulsionizing power of the pancreatic juice lies outside of its ferments, then the name pancreopepsin- might properly refer to the pancreatic juice rather than to pancreatin under the conditions imposed by the question.

X Q. 121. You have referred to a pancreatic tincture made by the combination of alcohol and the pancreatic juice; the pancreatic glycerole made from pancreatic juice and glycerine; to pancreatic solutions; now are there not a great many other preparations made and known and derived from pancreatic juice?

141 A. I do not think of any others, excepting, of course, those in which it is combined with other active substances, as, for instance, with pepsin.

X Q. 122. What would you call pancreatic emulsion? That is, would it come under either of the classes above named?

Objected to as immaterial.

A. It would come in the last class I mentioned, viz., that in which it is combined with other active substances, pancreatic emulsions being used for the sake of the fat rather than for the pancreatic material.

X Q. 123. Have you ever analyzed the complainant's liquid pancreopepsine?

Objected to as immaterial.

A. I have not.

X Q. 124. Can you tell from the name pancreopepsine whether complainant uses in such preparation a pancreatic tincture, a pancreatic glycerole, a preparation from the pancreatic juice embodying particularly that property which the United States Dispensatory says is exclusive of the ferment or the pancreatic juice, as it is directly and most simply derived from the gland?

Same objection.

A. I cannot.

X Q. 125. Have you analyzed the defendants' pancro-pepsin?

Same objection.

A. I have not.

X Q. 126. Can you tell from the name pancro-pepsin whether the preparation contained therein is a pancreatic glycerole or a pancreatic tincture or a preparation from the pancreatic juice embodying chiefly that property which the United States Dispensatory says is exclusive of the ferment, or the most simple form of pancreatic juice?

142 A. I cannot, nor would it be consequential in connection with either this question or the second preceding, for whether a tincture, a solution, a glycerole or some other preparation of pancreatic juice or of the pancreas was used, practically the same activity would be imparted to the preparation, and the prefixes "pancreo" and "pancro" recall the connection of the substance with

the juice or the gland, and not with the medium by means of which the connection is made.

All after the words "I cannot," is objected to as volunteered and irresponsive and argumental.

X Q. 127. In the very early part of your direct examination, viz., question 3, your attention was called to various exhibits, and amongst others to "Defendants' Exhibit Hereth's Specimen Liquid Pancro-pepsin," and you looked at the bottle and the label thereon. Is not this correct?

A. It is.

X Q. 128. And you observed, did you not, that the bottle not only contained the title "liquid pancro-pepsin," but also named in a descriptive manner some of the ingredients? Is not that correct?

A. It is.

X Q. 129. You observed that after using the name "pancro-pepsin," the label further described that this pancro-pepsin contained pancreatin and pepsin, did you not?

A. I observed that the label stated that pancreatin and pepsin were among the substances present in the preparation.

X Q. 130. Pancreatic tincture is not the same as pancreatic glycerole, is it?

A. It is not, but if properly prepared, both should contain as their active constituent the pancreatic ferments and therefore both should be alike in their essential nature.

X Q. 131. Just in the same way as the various bromides each and all have bromine entering as an active constituent. Is not that correct?

143 It is entirely incorrect, for the different bromides owe their remedial activity only in part to the bromine which they contain, the base with which the bromine is united frequently playing a very important part. For example, bromide of sodium and bromide of arsenic have quite different effects upon the system; both, it is true, contain bromine, but the sodium in one and the arsenic in the other radically change the deportment of the two substances. Different bromides, therefore, may be used for quite different purposes, but whether the active constituents of pancreatic juice are dissolved in glycerine, or in water, or in some other fluid, their effect on the economy is practically the same. There is consequently no analogy between the use of different bromides and the use of different preparations of pancreatic juice.

Answer objected to as irresponsive.

X Q. 132. No matter which of the bromides is used in connection with, say, caffeine, the prefixed bromo refers to the bromine because that is one principle which is present in all of the bromides. Is not this so?

Objected to as incompetent and immaterial.

A. The prefix "bromo," under the conditions of the question, would refer to any bromide, of which there is a large number

known. The prefix "bromo" would indicate any one or all of a large general class of salts and not any one individual member of the group nor to any particular part of the group; in the connection indicated in the question it would refer to bromides and not to bromine.

X Q. 133. In every bromide bromine is a constituent part, is it not?

A. It is.

Adjourned until Monday at 2 o'clock.

THURSDAY, *December* 15, 1898—2 p. m.

By agreement adjourned from Monday to Thursday.

144 Met pursuant to adjournment.
Present: Same as before.

X Q. 134. The word "pancreazymose" is a recognized chemical term, is it not?

A. I am not acquainted with the term myself, but I may say that during the past few years many words have been invented by individual writers on scientific subjects which never gain any general acceptance; possibly "pancreazymose" may be one of these.

X Q. 135. You are not prepared to deny that it is the name of a substance and recognized as such by reliable authority, are you?

A. I am not, although, as I have stated before, I do not now recall having seen the word before.

X Q. 136. It may be recognized by authority as a proper designation for one of the ferments of pancreatic juice, may it not?

A. It is, of course, possible that some writer may use the word to designate one of the ferments of the pancreatic juice; but, if such is the case, it is very infrequently employed.

X Q. 137. Please name some of the medical dictionaries which you understand to be reliable.

A. I consider Gould's Medical Dictionary as the best we have; and among others besides this I may mention Foster's, Dunglison's and Thomas'.

X Q. 138. If Gould recognizes this word as designating one of the pancreatic fe-ments you would consider the authority reliable, would you not?

A. Yes; but even if Gould's Dictionary were to include the word, this fact would by no means necessarily prove that the term is a common one or one that has met with general acceptance.

145 The function of a large medical dictionary like Gould's is to enumerate all medical words, however much or however little they may be used.

X Q. 139. What does the suffix "zymose" mean?

Objected to as immaterial and irrelevant.

A. As I do not know the word of which this is the ending I naturally cannot give a specific answer. The resemblance that it bears,

in a certain degree, to "zymogen" would suggest to my mind that it might signify a substance produced.

X Q. 140. Please name some human physiologies which you understand to be among the most reliable.

Objected to as immaterial.

A. The latest and best physiology with which I am acquainted is "The American Text-book of Physiology," a large and up-to-date book written by a number of prominent American physiologists and edited by Dr. Howells, of Johns Hopkins university. In addition to this I may mention Kirk's Physiology, Flint's Physiology, Foster's Physiology and Dalton's Physiology; as far as I know, however, none of these last-named have been brought down strictly to date, and, consequently, they are likely to contain statements that are erroneous in the light of more recent investigations.

X Q. 141. Referring to Dalton's Physiology, pp. 168, 169, beginning with the second paragraph on the former page, you find it stated in substance that the pancreatic fluid contains, amongst other things, three separate ferments, namely, one for a transforming action on starch, called "pancreatin;" one for digestive action on coagulated albumen, called "trypsin," and one for a partial acidifying action on fats, which is not given a name, do you not?

By Mr. DYRENFORTH: The question is objected to as incompetent, immaterial and irrelevant. Any reference to this book is
146 objected to as incompetent and immaterial, since it appears not to have been published until the year 1882. All questions throughout the cross-examination which pertain to designations in — way allied to, or resembling, the word "pancreatin" are objected to as incompetent and immaterial, unless it shall be made to appear that such designations were known to physicians and pharmacists prior to the year 1876.

A. I do; and I also find, on p. 168, the following statement:

"All these substances" (referring to the three ferments) "may be precipitated by alcohol, from pancreatic juice, or extracted by water or by glycerine from the pancreatic tissue; but they have not been obtained in a state of purity, or even distinctly separated from each other, to the satisfaction of physiological chemists."

From this it is clearly seen that Dr. Dalton's so-called "pancreatin" did not have any separate existence, since it could not be isolated, even by physiological chemists, from the other pancreatic ferments, but was always accompanied by the latter in any pancreatic preparation that might be made.

By Mr. BROWN: Counsel for complainant objects to all of the above answer after the words "I do," as volunteered and irresponsive and argumentative, and he calls the attention of the court especially to this example.

X Q. 142. You have testified in effect that hydrochloric acid is the most important digestive agent in the gastric juice, have you not?

A. I have not made exactly that statement; what I did say was, in answer to X Q. 65, that under ordinary conditions the gastric juice contains as its chief active constituents, pepsin and hydrochloric acid.

147 X Q. 143. You also referred to other constituents of the gastric juice. What gives the greater activity to hydrochloric acid than to the other ingredients, excepting pepsin, the greater relative quantity of the hydrochloric acid or the greater relative intensity of it?

Objected to as immaterial.

A. There are two reasons why the hydrochloric acid of the gastric juice is of so much importance: First, pepsin cannot act as a digestive agent, except in the presence of an acid, and of all acids hydrochloric acid is the most efficient in this direction. Second, hydrochloric acid is an antiseptic agent of much power, and its presence in the gastric juice, therefore, has a tendency to prevent putrifactive changes in the food during digestion, which would otherwise be likely to occur. It is not on account of its quntity, for it is present in only relatively small amount, but by reason of the special actions spoken of above that hydrochloric acid is so important a constituent of the gastric juice.

X Q. 144. Has hydrochloric acid no digestive action of its own?

A. That depends upon the meaning we give to the expression "digestive action." If we understand by this the transformation of a food into an ultimate product of digestion, then hydrochloric acid would not be called a digestive agent; but if we understand by the expression the partial conversion of a food into a product of digestion, then hydrochloric acid is possessed of digestive action. When brought in contact with proteids this acid converts them, more or less rapidly, into acid albumen which is soluble, and on this account, therefore, we might say that it is a digestive agent; but as it never carries the proteids through to final peptones, we should be justified for this reason in saying that it is not a

148 digestive agent. The answer to the question, therefore, as I have before said, depends upon the meaning we give to the expression "digestive action."

X Q. 145. Then, do you wish to be understood as being of the opinion that hydrochloric acid alone, at a proper temperature, would not convert cane sugar into glucose?

By Mr. DYRENFORTH: I have been as forbearing as possible throughout this cross-examination, but I feel called upon to protest against the manner in which the true issue of this case is being befogged. I object to the question as incompetent, immaterial and irrelevant.

A. By no means; it is a well-known fact, and one that is taken advantage of constantly in the chemical laboratory, that cane sugar in contact with hydrochloric acid of sufficient strength and at a sufficiently elevated temperature is converted into a mixture of dextrose and levulose, or, as we sometimes say, into glucose.

X Q. 146. Does not hydrochloric acid perform a similar conversion in the stomach?

Same objection.

A. I believe it is generally admitted today that this action does not take place in the stomach by reason of any action of the hydrochloric acid, the latter being too dilute to act, in any material degree, upon cane sugar at the temperature of the body. It is true, however, that cane sugar may be, to a greater or less degree, "inverted" (that is converted into a mixture of dextrose and levulose) in the stomach, but this action is due to other agencies.

X Q. 147. What function does lactic acid perform in the gastric juice?

Same objection.

A. It has the same functions as the hydrochloric acid.

149 X Q. 148. Does the pancreatic juice act as powerfully as a digestive in the presence of hydrochloric and lactic acids as when they are absent?

Same objection.

A. It acts less powerfully; the presence, however, of a small amount of acid does not entirely prevent its digestive activity.

X Q. 149. Is the British Pharmacopœia recognized as a reliable authority?

A. It is in Great Britain, but not in this country.

X Q. 150. Is not the United States Pharmacopœia large- copied from the British Pharmacopœia?

A. It is not; the United States Pharmacopœia is an original work, and while many of its statements, descriptions and processes are the same as those in the British Pharmacopœia they are not copied from the latter, but simply have the same similarity as would be found in almost any two scientific works treating of the same subject.

X Q. 151. Is there any such substance or name as "pancreatin" to be found in the British Pharmacopœia?

Objected to as immaterial.

A. I do not know.

X Q. 152. Do you not know that in the British Pharmacopœia the pancreas and pancreatic juice are recognized, but not pancreatin?

Same objection.

A. I cannot say; as I have before stated, the British Pharmacopœia is not an authority for the United States, and consequently I rarely have occasion to refer to it.

X Q. 153. Do you have occasion to refer to the German and French Pharmacopœias?

Same objection.

A. Only occasionally.

X Q. 154. Do you not know that the substance pancreatin
150 is not recognized by that name in these Pharmacopœias?

Same objection.

A. I do not.

Redirect examination by Mr. DYRENFORTH:

R. D. Q. 155. Is "boral" a substance generally referred to in books on medicine?

Question objected to as not proper redirect and as leading.

A. It is not. It is not mentioned in the United States Pharmacopœia nor in any one of the three Dispensatories. I cannot find it in any standard medical dictionary nor have I been able to discover any allusion to it in any recognized work on materia medica or on the practice of medicine.

R. D. Q. 156. Since the name "pancrene" was referred to in the cross-examination have you looked for it? If so, what have you found concerning it?

A. I find, upon looking it up, that it is an old or obsolete word for pancreas.

R. D. Q. 157. Is "pancratium" a substance spoken of in books on medicine?

A. The word does not occur in the United States Pharmacopœia, nor in any one of the three Dispensatories, as far as I have been able to discover; neither have I been able to find it in any work on materia medica or therapeutics that I have consulted, and I have looked through upwards of half a dozen of our best authorities; nor can I find any reference to it in any book on the practice of medicine that I have looked over. It is true that the word may be found in some of the medical dictionaries, but that it is practically obsolete is shown by the fact stated above, that it does not appear in any of our medical books of today as far as I can learn.

151 R. D. Q. 158. Since the subject was broached in the cross-examination have you made any investigations to ascertain whether squill is ever used in the treatment of disorders of the stomach? If so, with what result?

A. I have made a careful investigation in regard to this subject, and I cannot find a single authority that recommends, or even suggests, the use of squill in stomach disorders. This is what should be expected from our knowledge of the physiological action of the drug; it is well known to be intensely stimulating and irritating, producing, when taken internally in other than small doses, vomiting and purging. It is a useful diuretic and expectorant, and its use, in medicine, is practically limited to disorders demanding these actions. As Dr. Bartholow says, in his well-known work on materia medica and therapeutics, edition of 1878: "The use of squill is confined to its expectorant and diuretic effects." It is a commonly known fact that when squill has to be given for its effects on the lungs or kidneys the stomach is often completely upset by its action, particularly when administered for some time. The National Dis-

pensatory, speaking of this subject, says: "The continued use of squill impairs the appetite and digestion." My investigation shows, therefore, that squill is not used in stomach disorders, and in fact would be contra-indicated in diseases of this organ, excepting, possibly, if used as an emetic.

R. D. Q. 159. The name which has been employed by the complainant in this suit to designate the compound which he sells is "Pancreopepsine." Could the part "pancreo" be properly employed as an abbreviation for "pancratium"? Please give your reasons for your answer.

A. The prefix "pancreo" certainly could not be used as an abbreviation for "pancratium." The reason is obvious; not only
152 is there no "e" following the "cr" in "pancratium" as there is in "pancreo," but there is not an "e" in the entire word. It is perfectly clear, therefore, that "pancreo" could not possibly be used as an abbreviation for "pancratium."

R. D. Q. 160. What signification did the word pancreatin have to chemists, physicians and pharmacists in the year 1876?

Question objected to as misleading.

A. The word referred to the active part of the pancreatic juice, or of the pancreas. I know this from personal experience, and it is also evident from historical consideration. As I have before stated in this deposition, pancreatin was discovered in 1845 by two French chemists, who prepared it by digesting the pancreas in water and adding to the solution thus obtained a quantity of strong alcohol. In this operation the active principles of the pancreas were dissolved out by the water and were precipitated from this solution by the added alcohol. It is true that the discoverers did not recognize all of the digestive properties possessed by the compound they had discovered, but nevertheless the properties were all there, although unknown. Pancreatin continued to be made by the same, or essentially the same, process as that used by its discoverers for a number of years, and gradually its true powers and true composition became known. By referring to the National Dispensatory, published in 1879, under the heading "Pancreatin," we find a substance described, made in practically the same manner as by its original discoverers. All of its powers as a digestive agent are made known in this article, its starch, proteid and fat-digesting ability all being mentioned. We see, therefore, that beginning with its discovery thirty-one years prior to 1876, and ending with the National Dispensatory three years after
that date, "pancreatin" is made in practically the same manner,
153 and, of necessity, has essentially the same properties. The discoverers called the substance which they prepared "pancreatin;" this substance contained all the ferments of the pancreatic juice; it is perfectly obvious, therefore, that no other use of the word is justifiable than that which gives to it a generic significance. Attempts have been made at times by individual chemists to apply the word to some one of the ferments only, but not only have these attempts been repudiated by the scientific world, but the efforts were historically inaccurate, and, in addition, impractical. It is a well-known

fact that it is impossible to separate any one of the ferments of the pancreatic juice from the others with anything like accuracy; if a person, therefore, were to endeavor to isolate one of the ferments and call it "pancreatin," he still would have a mixture of all three, and his "pancreatin," therefore, would still, of necessity, represent all of the actions of the pancreatic juice.

In 1876, therefore, the word "pancreatin" was applied by the scientific world to a mixture of all the ferments produced in the pancreas and found in the pancreatic juice.

Adjourned to Friday afternoon, December 16, 1898.

FRIDAY, *December* 16, 1898—2 o'clock p. m.

Met pursuant to adjournment.
Present: Same as before.

Redirect examination by Mr. DYRENFORTH continued:

R. D. Q. 161. Do you regard Webster's Dictionary as a reliable authority in matters pertaining to chemistry, medicine and pharmacy? In this connection, please state how it compares, in this respect, with Gould's Dictionary of Medicine, Biology and Allied Sciences.

A. Webster's Dictionary can be regarded as only imperfectly
154 reliable in connection with matters relating to chemistry, medicine and pharmacy; the dictionary endeavors to cover the whole field of the English language, and the ground is too broad to be covered with great accuracy by a single book. Dictionaries devoted to special subjects, like Gould's, are naturally far more reliable in connection with the special subjects of which they treat.

R. D. Q. 162. I show you an edition of Gould's Dictionary bearing the publication date 1896 and the copyright date 1894. Please state whether that is the Gould's Dictionary to which you referred in your last answer, and whether it is the latest edition of that dictionary of which you have knowledge?

By Mr. BROWN: As counsel for complainant, I agree and stipulate that the dates indicated in the question as the publication and registration of the book referred to are correct, and do not object to the recent date of the work, but call the attention of the court to the fact that counsel for defendant objects to complainant's questions referring to late works, but freely uses such late works himself.

By Mr. DYRENFORTH: I cannot believe that my learned and astute brother Brown is not fully alive to the legal point involved in certain objections by me to which he has just referred, and does not fully realize the purport of the present question.

By Mr. BROWN: Yes, I am fully aware of the difference between the use of Gould's Dictionary by myself, to support my side of the case, against your objection on account of its recent date, and to your use of the same, notwithstanding its date, to support your side of the case. The difference is Biblically expressed when referring to the question as to whose ox is being gored.

A. The book handed me is a copy of the same Gould's
155 Dictionary to which I referred in my last answer, and, as far as I know, it is the latest edition of the work.

R. D. Q. 163. Please state what you find to be the definition of "pancreatin" in this latest edition of Gould's Dictionary.

A. Upon turning to p. 965 of this latest edition of Gould's Dictionary I find that "pancreatin" is defined as follows:

"The active elements of the juice of the pancreas; also the commercial extract of the pancreas. It is added to fats, milk, soups, gruel, etc."

R. D. Q. 164. What have you to say as to whether or not the substances defined as "pancreatin" in Gould's Dictionary, to which you have just referred, are the same substances that were so defined in the year 1876 and previously?

A. They are the same.

R. D. Q. 165. Is the emulsifying power of the pancreatic juice connected with its ferments, or any of them?

A. The emulsifying power of the pancreatic juice is directly connected with that one of its three ferments which is called steapsin; without the aid of this ferment pancreatic juice is incapable of emulsifying fats. That the emulsifying action of the pancreas and of its juice is due to the presence of steapsin is admitted by modern investigators, and the hypothesis that something else was present that produced emulsions is not accepted. In this connection I may quote the language of the National Dispensatory, edition of 1894, page 1189:

"The pancreas is a gland which is deeply seated in the abdomen and secretes the *pancreatic juice*, containing the proteid *pancreatin*, to which it owes the property of peptonizing albuminoids, of emulsifying and decomposing fats into glycerine and acid, and of converting starch into sugar."

156 I may also quote the words of the American Text-book of Physiology, which, after explaining the connection of steapsin with the emulsionizing of fats, says, on page 246;

"It has been suggested that the proteids in solution in the pancreatic juice aid in the emulsification, but there is no experimental evidence to show that this is the case."

It is clear from the above, and from other quotations which might be made, that the emulsifying power of the pancreatic juice is dependent upon one of its ferments, namely, steapsin.

R. D. Q. 166. Is there a relation between the United States Dispensatory and the United States Pharmacopœia, and also between the National Dispensatory and the United States Pharmacopœia? If so, what is the relation?

A. The United States Pharmacopœia is the supreme, authoritative work in this country in connection with medicines; it names them, describes them, gives tests for their purity, etc. The two Dispensatories are based upon the Pharmacopœia, but they are more extended in their scope; they amplify what the Pharmacopœia says and explain the action of drugs on the system and their medicinal use. In addition the Dispensatories treat of some remedial agents

which are not included in the Pharmacopœia, such as those that have not been sufficiently long in use, or have not been proven sufficiently to be possessed of great enough merit to be recognized by the higher authority.

By Mr. DYRENFORTH: I offer in evidence typewritten copies of published articles referred to by Professor Haines in his answer to Q. 13, and the same are marked as follows:

1. "Defendants' Exhibit Articles from the United States Dispensatory, A and B."

2. "Defendants' Exhibit Article from American Journal of Pharmacy, 1871."

157 3. "Defendants' Exhibit Articles from American Journal of Pharmacy, 1873, A and B."

Recross-examination by Mr. BROWN:

R. X Q. 167. Which has the higher reputation, the United States Dispensatory or the National Dispensatory?

A. It is difficult to say; they are both good books, but I, myself, somewhat prefer the National Dispensatory.

R. X Q. 168. Which is the one more generally used by druggists and physicians?

A. I should say that at the present time they are probably about equally used, but I should add that the National Dispensatory has been much more recently established than the other. The first edition of the National Dispensatory appeared, I believe, in 1869, while the earliest volume of the United States Dispensatory came out many years before. The United States Dispensatory, therefore, has been in use for a greater number of years than the National Dispensatory, but, as I before stated, I believe at the present time they are used to very nearly an equal degree.

R. X Q. 169. As appeared in a quotation from p. 1007 of the United States Dispensatory, which you admitted was correct in your cross-examination, pancreatin was stated to be a preparation in the nature of an extract from the pancreas; and Gould's Dictionary also, as one definition of the term "pancreatin," states it to be "the commercial extract of the pancreas," as you have cited in one of your answers. Both of these authorities agree on this proposition, do they not?

Objected to as immaterial.

A. They do.

R. X Q. 170. Gould's Dictionary, which you have recog-
158 nized as the best medical dictionary, after describing pancreatin, separately defines pancreatic liquid, or, in Latin, *pancreaticus liquor*. Is not this correct?

Objected to as immaterial.

A. Gould's Dictionary speaks of "*liquor pancreaticus*," which, rendered into English, means pancreatic solution.

Answer objected to as irresponsive.

R. X Q. 171. And Gould's Dictionary separately describes "*pancreaticus liquor*" after its description of pancreatin, does it not?

Objected to as immaterial.

A. It does.

R. X Q. 172. In your redirect examination you have stated that it is the ferment steapsin which is the emulsifying agent of the pancreatic juice, but the United States Dispensatory states that steapsin is the ferment which has the power of splitting up fats into glycerine and fatty acids, and that the emulsifying property of pancreatic juice is "independent of any of the ferments, and is probably dependent on the presence of a peculiar form of casein or albumin," and thus contradicts your statement. Is not this so?

Objected to as incompetent and immaterial.

A. It is quite true that steapsin has the power of decomposing fats into glycerine and fatty acids, and it is this very action on the part of the steapsin that enables pancreatic juice to emulsionize fatty bodies. That this is so is well recognized by authorities on physiology. The quotation from the United States Dispensatory to the effect that the emulsifying property of pancreatic juice is independent of its ferments is absolutely incorrect, and I so stated in my cross-examination when this same quotation was read to me. I would now simply reaffirm my previous statement, and would again direct attention to the language of the American Text-book of
159 Physiology quoted in my answer to R. D. Q. 165, which shows that it has never been demonstrated that the emulsifying power of the pancreatic juice is dependent on its proteids, that is, on its casein or albumin, both of these substances being proteids. The United States Dispensatory is not authority on the subject of physiology, while the American Text-book of Physiology is, and when they differ in regard to physiological actions the Text-book of Physiology is, of course, to be accepted.

R. X Q. 173. And you have also admitted in your cross-examination, and it is true, is it not, that Dunglison's Dictionary agrees with the United States Dispensatory in ascribing the emulsifying action of the pancreatic juice to a peculiar albuminoid principle, which Dunglison designates as "pancreatin"?

Objected to as incompetent and immaterial.

Question withdrawn.

R. X Q. 173. Dunglison's Dictionary of 1874 states as follows: "Pancreas secretes the pancreatic juice. When this juice is mixed with amylaceous matters it converts them into dextrin and glucose. Its great use appears, however, to be to emulsify fatty matters by virtue of a peculiar albuminoid principle—pancreatin—which it contains."

If this quotation is correct, Dunglison agrees with the United States Dispensatory in ascribing the emulsifying action of pancreatic juice to the albuminoid principle, does he not?

Objected to as incompetent and immaterial.

A. By no means. The two works make practically diametrically opposite statements. The United States Dispensatory says that it is not the pancreatin that emulsifies fats, while Dunglison distinctly states that it is.

R. X Q. 174. The United States Dispensatory says it is a "peculiar form of casein or albumin" which emulsifies fats, and Dun-
160 glison says it is "a peculiar albuminoid principle" which emulsifies fats. These two statements agree, do they not?

Same objection.

A. They agree only to this extent, that the United States Dispensatory says that the emulsifying power of the pancreas is due to a form of casein or albumin, which, however, is not pancreatin, while Dunglison's Dictionary says that the action is produced by an albuminoid principle which is pancreatin. They clearly refer to two entirely different substances—that of the United States Dispensatory being a proteid that is not pancreatin, while that of Dunglison's Dictionary is a proteid that is pancreatin. There is evidently no connection between the two.

R, X Q. 175. Dunglison's Dictionary and the United States Dispensatory agree in ascribing the emulsifying action of the pancreatic juice to a peculiar form of albumen, do they not?

Same objection.

A. Not at all; the United States Dispensatory attributes the emulsifying power to a "peculiar form of casein or albumen," while Dunglison attributes it to "a peculiar albuminoid principle." There is necessarily no connection whatsoever between an albuminoid principle and a peculiar form of casein or albumen, and that this is true in this case is clearly demonstrated by the fact that the United States Dispensatory says that the peculiar form of casein or albumen which it speaks of lies outside of pancreatin, while the albuminoid principle which Dunglison mentions he clearly says lies within pancreatin, or is pancreatin.

Answer objected to as volunteered, argumentative and misleading.

R. X Q. 176. You do not find in the United States Dispen-
161 satory, do you, any such words as "that the peculiar form of casein or albumen is not pancreatin," but you rely upon that as a conclusion or inference.

Same objection.

A. The United States Dispensatory says in regard to the peculiar form of casein or albumen that "it is independent of any of the ferments." Since pancreatin consists of the ferments it is clear that the peculiar form of casein or albumen spoken of cannot be pancreatin. I do not find it stated in words "that the peculiar form of casein or albumen is not pancreatin," but, as I have shown in the above paragraph, the inference to that effect is unavoidable.

R. X Q. 177. Your inference does not constitute a showing, necessarily, and if we suppose that pancreatin does not, as you say, consist

of the ferments, but is, as stated, an extract made from the pancreatic gland, such an extract may exclude the ferments and be the peculiar form of albumen which the United States Dispensatory says is independent of them and emulsifies fats. Is not this correct?

Same objection.

A. Any extract of the pancreatic gland would surely contain its ferments if prepared with the slightest degree of skill, and therefore such extract would contain pure pancreatin.

Answer objected to as irresponsive and evasive.

By Mr. DYRENFORTH: It is difficult to conceive any position in which a person is more defenceless than when he is a witness under cross-examination. Complainant's counsel should realize that to insult a witness under these conditions is unchivalrous. To do so certainly does not require courage.

162 By Mr. BROWN: I decline to quarrel on the record. Let the court decide whether the objection "evasive" is not a proper one, both with reference to the answer given and under the well-known rules of evidence. I am not attending schools of chivalry or courage, although I have no doubt that Mr. Dyrenforth could teach both were there a necessity for them. I am trying to do my duty by my client, and I do not propose to be diverted from that end by the continual use of harsh expressions in regard to my objections.

R. X Q. 178. The pancreatic juice was well known, as was also its digestive properties, before what you have termed the discovery of pancreatin. Is not that so?

A. The pancreatic juice was known before that time, but its full digestive powers were not known till much later. A part of its digestive action was recognized at that time, but its powers were not known in full.

R. X Q. 179. But it was known to have a digestive action long before the term "pancreatin" was employed, was it not?

A. I believe the discovery of pancreatin was the first step in the scientific demonstration of the digestive power of the pancreatic juice; previous to that time the office of the pancreas and of its juice was uncertain and little known.

R. X Q. 180. Was not the "*liquor pancreaticus*" known long before the term "pancreatin"?

A. The term "*liquor pancreaticus*," meaning, as I believe it formerly did, the pancreatic juice, has long been used; but the term "liquor pancreaticus" of pharmacy, signifying a pancreatic solution, is, as far as I am informed, a comparatively recent term. The term in its first acceptation was, I believe, used before the introduction of the word "pancreatin."

163 R. X Q. 181. Was the term "pancreatin" recognized in any United States Pharmacopœia prior to 1890?

Objected to as immaterial.

A. I think it was not.

R. X Q. 182. The medical substance ipecac is used mainly as an emetic, expectorant and cholagogue, is it not?

A. It is used largely as an emetic, expectorant and diaphoretic; that is possesses any real cholagogue properties is questionable.

R. X Q. 183. It is equally as strong an emetic and expectorant as squill, is it not?

Objected to as immaterial.

A. It is, in a way; the two, however, can scarcely be compared, as they act in a totally different manner. Squill acts by reason of its powerful stimulating and irritating properties locally, while ipecac acts rather by its general influence.

R. X Q. 184. Ipecac, in very small doses, is a mild tonic and stimulant to the stomach, is it not?

Same objection.

A. It is.

R. X Q. 185. Dr. Fothergill recommends it in his works as a tonic in cases of dyspepsia, does he not?

Same objection.

A. I cannot say whether he does or not.

R. X Q. 186. Do you not know that there is a well-known anti-dyspeptic combination on the market taken from Dr. Fothergill's works which contains ipecac as one of its ingredients?

Same objection.

A. I do not; I cannot possibly acquaint myself with the formula of all the pills, powders and other preparations put on the market by manufacturing druggists.

164 R. X Q. 187. Is not Dr. Fothergill recognized as good medical authority?

Same objection.

A. During his life he was much admired by many and considered by them excellent authority, but there were also many in the profession who considered him a somewhat unreliable observer, and the same opinions prevail today regarding him.

WALTER S. HAINES.

Adjourned to Saturday, December 17, at 10 o'clock a. m.

SATURDAY, *December* 17, 1898—10 o'clock a. m.

Met pursuant to adjournment.
Present: Same as before.

GIDEON D. SEARLE, a witness produced and sworn in behalf of the defendant, deposes and says, in answer to questions by Mr. Dyrenforth, as follows:

Q. 1. What is your name, age, residence and occupation?
A. Gideon D. Searle; fifty-two years; Chicago, Illinois; president of the Searle & Hereth Company.
Q. 2. Before the Searle & Hereth Company was organized, were you in partnership with Mr. Hereth?
A. No, sir. We were in partnership a year before the Searle & Hereth Company was organized. I did not understand the question at the time I answered "No, sir."
Q. 3. Where were you first in partnership with Mr. Hereth? That is to say, where did you first carry on business together as partners?
A. At Omaha, Nebraska.
Q. 4. When did you begin business in Omaha?
A. The first day of January we landed there, in 1888.
Q. 5. When, if at all, did you and Mr. Hereth begin to
165 manufacture any substance to which the name of "Pancro-Pepsin" was given, and to put it upon the market.
A. It was late in the fall of '88 or early in '89.
Q. 6. Who gave the compound the name "Pancro-Pepsin"?
A. Mr. Hereth.
Q. 7. Do you know for what reason the name was selected?

Objected to as immaterial and incompetent.

A. Simply for a descriptive name for the remedy.
Q. 8. Was the matter of the name talked over at the time between yourself and Mr. Hereth?
A. Yes, sir.
Q. 9. What, if you know, was the object of giving the remedy a descriptive name?

Objected to as immaterial and irrelevant.

A. It being a short name, and the name itself implying what the remedy contained.
Q. 10. Had you been in the drug business before you entered into partnership with Mr. Hereth? If so, where, and for how long?
A. Yes, sir; I was five years in Fortville, Indiana, and thirteen years in Anderson, Indiana.
Q. 11. Prior to the time when you and Mr. Hereth adopted and put upon the market your medicinal compound under the name "Pancro-Pepsin," had you never heard of a medicinal compound which had been manufactured and put upon the market under the name of "Pancreopepsine"?
A. No, sir.
Q. 12. Did you know, prior to the time of the adoption by you

and Mr. Hereth of the name "Pancro-Peps-n," and the putting of the compound on the market under that name, that Wil-
166 liam R. Warner, of Philadelphia, had manufactured and put upon the market a medicinal compound under the name of liquid "Pancreopepsine"?

A. No, sir.

Q. 13. During the whole time that you were in the retail drug business in Fortville, Indiana, and Anderson, Indiana, were you accustomed to sell patented medicines and proprietary remedies?

A. Yes, sir.

Q. 14. Were physicians' prescriptions filled in your drug stores?

A. Yes, sir.

Q. 15. I understand, from one of your previous answers, that you had a retail drug store in Anderson, Indiana, from about 1875 onward. Is that correct?

A. From 1874 to 1887.

Q. 16. During the whole of that period, did you know of any physician's prescription which called for a substance called "Pancreopepsine" or "Liquid Pancreopepsine"?

A. No, sir.

Cross-examination by Mr. BROWN:

X Q. 17. During what years were you in Fortville, Indiana?

A. From 1869 to 1874.

X Q. 18. When did you leave Anderson, Indiana?

A. I quit doing business in Anderson on the 5th day of August, 1887, that is, I sold my drug store on that day.

X Q. 19. Where did you next do business?

A. Omaha.

X Q. 20. While you were in Anderson, Indiana, from what persons and at what places did you usually buy your drugs?

A. At Indianapolis and New York, and some in Cincinnati and Chicago.

167 X Q. 21. How far is Anderson from Indianapolis?

A. Thirty-six miles.

X Q. 22. From what persons in Indianapolis did you buy, chiefly?

A. Browning & Sloan, Stewart & Morgan and A. Kiefer & Co. I bought goods of the Richardson Drug Company when they were there. I don't remember all the firms.

X Q. 23. Were you acquainted with Mr. James E. Lilly in Indianapolis?

A. Yes, sir.

X Q. 24. Did you buy any drugs from him?

A. Fluid extracts and elixirs, and pharmaceutical preparations of their own make.

X Q. 25. These pharmaceutical preparations included liquid preparations, I suppose?

A. Yes, sir.

X Q. 26. And did you buy from James E. Lilly before he was with Eli Lilly & Company?

A. No, sir; I did not know him before he was with Eli Lilly & Company.

X Q. 27. Did you buy any drugs or preparations from A. D. Roach?

A. Yes, sir; I think I did.

X Q. 28. In what year?

A. Some time after I was in Anderson; I don't know what year.

X Q. 29. At the time he represented William R. Warner & Company, of Philadelphia, did he not?

A. Yes, sir; I think so.

X Q. 30. What was the name or style of the firm under which you did business in Anderson, Indiana?

A. Three years under the name of Anderson & Searle, and ten years under the name of G. D. Searle.

168 X Q. 31. Those were the only names, were they?

A. Yes, sir.

X Q. 32. While you did business in Anderson, Indiana, did you fill any prescriptions calling for or had occasion to use any drugs including preparations from the pancreatic juice or panceras?

Objected to as immaterial and as not founded on the direct examination.

A. I don't remember.

X Q. 33. Did you use any drugs including the commercial substance known as "pancreatin," or fill any prescriptions including "pancreatin"?

A. I had pancreatin in stock. I don't remember any particular prescriptions being filled containing it.

X Q. 34. From whom did you purchase the pancreatin you had in stock?

A. I don't remember.

X Q. 35. What is the name of the maker of it?

A. I don't remember that.

X Q. 36. Did you purchase any preparation including pancreatin from A. D. Roach?

A. Not that I remember.

X Q. 37. Did you purchase any preparations including pancreatin from James E. Lilly?

A. Not that I remember.

X Q. 38. Did you purchase any preparations including panceratin from Eli Lilly & Company?

A. I don't remember whether I did not. I used to get most of my elixirs from Wyeth & Company.

X Q. 39. This Wyeth to whom you refer was located in Philadelphia?

A. Yes, sir.

X Q. 40. What was the nature of your business when you started in in Omaha?

A. Manufacturing pharmacists.

169 X Q. 41. When did you actually commence the manufacture?

A. January or February, 1888.

X Q. 41½. From whom did you purchase the ingredients of the preparations which you manufactured during the first year you were in Omaha?

Objected to as immaterial.

A. Wallace Bros. and Pinkus, of Statesville, N. C., and Richardson Drug Company, of Omaha. That was the first bill, and afterwards we bought of others.

X Q. 42. Did you see a catalogue or list of the drugs and chemicals of the Richardson Drug Company at that time?

A. They got out a list at that time, but I don't remember of examining it at all. We got lists from Statesville that we made our order from.

X Q. 43. Did you not make your order from the Richardson Drug Company from a list or catalogue given by them?

A. No, sir; we did not.

X Q. 44. The catalogue or list of the Richardson Drug Company was accessible to you and your partner at that time, was it not?

A. Yes, sir.

X Q. 45. And you probably looked it over, did you not?

A. We looked it over, but not critically. We picked it up and looked through it gradually or something of that kind.

X Q. 46. You looked at the lists or catalogues of the manufacturers from whom you purchased in Statesville, N. C., did you not?

A. Yes, sir. Their catalogue consisted of roots, barks and herbs, such as we wanted to make fluid extracts of.

X Q. 47. You looked over the catalogues of the New York
170 firms or companies whom you purchased from while you were at Anderson, did you not?

A. Yes, sir.

X Q. 48. You looked over the catalogue of the firms and companies from whom you purchased preparations in Philadelphia, did you not?

A. Yes; I looked them over.

X Q. 49. You looked over the catalogues of the companies and firms from whom you purchased in Cincinnati and Chicago, did you not?

A. There were no catalogues that I ever saw, except from Eli Lilly & Co., Indianapolis.

X Q. 50. It is, in fact, the custom of all manufacturing firms to keep tab on the catalogues and lists of their competitors in business by examining their catalogues, is it not?

Objected to as immaterial.

A. We try to.

X Q. 51. You did this from the time you commenced the manufacturing business, did you not?

A. I don't think we did for the first year or two. Not all manufacturers, only a part.

X Q. 52. Before actually commencing manufacturing in Omaha

your firm gathered a number of catalogues and lists of competitors so as to see what to avoid making and what to make, did it not?

A. I think we had but two lists, Lilly's and Parke-Davis', as we considered they would be our principal competitors.

X Q. 53. What Lilly was that?

A. Eli Lilly & Co.

X Q. 54. When did you commence the manufacture of a preparation termed "compound digestive powder"?

171 Objected to as immaterial and not proper cross-examination.

A. I think it was about 1889.

X Q. 55. How long did you manufacture this compound under that name, "compound digestive powder"?

Same objection.

A. From that time till this. We are still manufacturing it.

X Q. 56. What name do you give it now?

Same objection.

A. Compound digestive powder.

X Q. 57. Is that the only name you give it now?

Same objection.

A. Yes, sir.

X Q. 58. What is the difference between this compound digestive powder, as you made it for the first year, and the preparation which you called "pancro-pepsin powder" a year or so afterward?

Objected to as incompetent and immaterial.

A. They contain the same ingredients, but not in the same proportions, and the compound digestive powder has powdered willow charcoal, which the other has not.

X Q. 59. How long after commencing the manufacture of compound digestive powder was it before you began to manufacture "pancro-pepsin" in the form of a powder, or, in fact, at all under that name?

Same objection.

A. They were both commenced about the same time, if I remember right, but I rather think the pancro-pepsin preceded the compound digestive powder.

X Q. 60. When did you first sell liquid pancro-pepsin under that name?

A. In 1889, I think it was.

172 X Q. 61. How long after the powder?

A. I don't just remember just how long it was after.

X Q. 62. It was some time thereafter, was it not?

A. Not very long.

X Q. 63. A year?

A. No, I don't think it was; I don't think it was more than three months.

X Q. 64. You are not absolutely sure whether it was in 1889 or in 1890, are you?

A. We made it before we came to Chicago in May, 1890, while we were yet in Omaha. I am sure we made it in 1889.

By Mr. BROWN: I object to Mr. Dyrenforth indicating what the witness has said. It is the business of the witness to give his answers and of the stenographer to take it down, and if she does not hear it all to ask the witness if there is anything else, and not for Mr. Dyrenforth to decide it. I have several times spoken of this off the record, so as to avoid the necessity of putting it on the record, but I feel now called upon to defend the interests of my client by calling attention to it.

By Mr. DYRENFORTH: Of all the statements that I ever heard an attorney make this is the smallest and most unwarranted. At the time Mr. Brown asked his last question, the questions and answers were flying more rapidly than they could be taken down on the typewriter. When Mr. Brown asked this question, "You are not absolutely sure whether it was in 1889 or in 1890, are you?" the witness answered: "It was in 1889." When the examiner was ready for his answer he added the words, "We made it before we came to Chicago, in May, 1890, while we were yet in Omaha."

173 I knew that the latter part was all that had been taken down and I said to the examiner that I believed the whole of the witness' answer was not down. The answer was read to the witness and he added the words, "I am sure we made it in 1889." I did not suggest by anything that I said what the answer should be and any intimation by Mr. Brown that I did so is utterly and gratuitously false.

By Mr. BROWN: As above indicated, on previous occasions when the stenographer failed to take down as rapidly as the witness answered, Mr. Dyrenforth volunteered to translate what the witness had added, and I objected to Mr. Dyrenforth acting as translator, and I leave it to the court to decide whether or not I was correct in making such an objection, or whether it was "small" or properly characterized in any such harsh manner. I indicated that it was the business of the stenographer to ask the witness for a conclusion to his answer when she did not hear it all and not the business of Mr. Dyrenforth to tell her what the witness had said. On the next question the witness again talked too fast for the stenographer and Mr. Dyrenforth, instead of having the stenographer attend to this after the witness had changed his sentence and, as I understood him, made a complete answer, suggested that there was another portion of the answer, whereupon I placed the objection noted upon the record. I again leave it to the court whether or not this was proper, and I again leave it to the court whether or not Mr. Dyrenforth's epithets in his preceding remarks are, under the circumstances, warranted or proper. As this record will show I have attempted to make my objections and what few statements I have

made in an entirely regular, legal manner, without the appli-
174 cation of epithets or personalities, and I repeat what I have heretofore said, that I shall not be diverted from my aim in protecting my client, in accordance with the rules of evidence, by objections or bulldozing tactics.

By Mr. DYRENFORTH: I do not know what Mr. Brown means by his statement that on former occasions I have "translated" anything that the witness said; but if, at any time, I did anything that Mr. Brown regarded as improper, it should have been commented upon at the time. That would have been more rational and more seemly than coming whining to the court about it at this late day.

By Mr. BROWN: Mr. Dyrenforth's continued use of epithets is evidenced also in his last statement. I shall not reply in kind. If Mr. Dyrenforth wishes to make a personal matter of this difference between us he will have to do it off the record. I do not propose to answer epithets on the record, for I do not consider it is proper respect to the court.

X Q. 65. Why are you sure it was made in 1889, if you only know that it was made before you came to Chicago in 1890?

A. I know it because I sold it myself on the road when I was traveling from Omaha.

X Q. 66. How do you know it was not in April or March, or February, 1890, that you were traveling from Omaha?

A. Because we sold it for a long time before we came to Chicago.

X Q. 67. What particular section did you travel in mostly when you made this sale?

A. Southern and western part of Iowa and Nebraska.

X Q. 68. Do you remember the first medical convention you sampled?

175 A. Yes, sir; at Lincoln, Nebraska.

X Q. 69. At what date?

A. I think it was in 1888.

X Q. 70. What season in 1888?

A. I think it was in the summer, if I remember right.

X Q. 71. What preparation was it?

A. There were several kinds; don't remember just what kinds we sampled.

X Q. 72. Is your name of "pancro-pepsin" registered as a trademark?

A. No, sir.

X Q. 73. Who first suggested the formula of "pancro-pepsin" to you?

A. I don't know; I think it was Mr. Hereth.

GIDEON S. SEARLE.

Adjourned, subject to further notice.

FRIDAY, *January* 6, 1898—1 o'clock p. m.

Met by agreement of counsel.

JAMES TURNER, a witness produced in behalf of the defendant, being duly sworn, deposes and says, in answer to questions by Mr. Dyrenforth, as follows:

Q. 1. What is your name, age, residence and occupation?

A. James Turner; I'll be seventy-six years the 8th of February, that is, next month; Martinsville, Indiana; my present business is deodorizing and carbonizing mineral waters.

Q. 2. In what business were you engaged in the year 1878 and where?

A. I was slaughtering and packing in this city.

Q. 3. For how many years were you engaged in the slaugh-
176 tering and packing business in the city of Chicago?

A. I followed that business here for thirty-six years.

Q. 4. About what year did you cease your connection with that business?

A. In 1888.

Q. 5. I have here a letter written on a sheet having a letter-head in the following words:

"Office of James Turner, 512 to 542 Archer avenue, slaughterer, packer, and dealer in hides and tallow. Packer of canned meats for European and domestic consumption. Manufacturer of pepsine and pancreatine. Liberal inducements to the wholesale trade.

CHICAGO, ILLS., —— —, 187–."

Please look at the letter-head, without any reference to the letter, and if you recognize it, state what it is.

A. Yes; it is my letter-head of that date.

Q. 6. That letter-head states that you were a manufacturer of pepsin and pancreatin. What was the foundation for that statement on the letter-head?

A. Merely because I was manufacturing it.

Q. 7. Written upon the sheet with the letter-head referred to, under date of June 29, 1878, is a letter addressed to "Mr. Joseph Dell, 174 Race street, Cincinnati, Ohio." Please look at the letter and state by whom, if you know, it was written?

A. It was written by a book-keeper of mine, whose name was George Black. When he signed my name he always put a "B" underneath it. I dictated that letter to him, and after he had written it I read it and looked it over, and I thought he hadn't explained it satisfactorily about the name of this compound, pancreatin and pepsin, and I wrote a postscript underneath his letter. That which is underneath is the postscript.

177 Q. 8. In whose handwriting is the body of the letter, if you know, and in whose handwriting is the postscript?

A. The body of the letter was written by Mr. Black and the postscript was written by myself.

Q. 9. As I have stated before, the letter referred to is dated June

29, 1878. Have you any knowledge or recollection as to whether that was the time, or about the time, that the letter was written?

A. I never dated anything wrong if I knew it. If I dated it at all I dated it correctly.

Q. 10. Please examine the letter to which your attention has been called and state, as nearly as you can recollect them, the circumstances under which it was written?

A. I had made a contract with Messrs. Dell & Clarke to take the sole agency for the sale of these ingredients that I was manufacturing, and we were trying to fix on a name for the article when produced. We had got a notion of one word to convey to outsiders about what it was, but I went to New York and saw my agent there and I found that Reed & Carnich were associated with another concern there by the name of Kidder & Laird. I found that the name that we had been talking about was used by this same firm there, so I wrote them saying that these parties were using this name, and I found that they had a suit with parties in England over the patent, and that they beat the English firm, so I was advocating then another name in place of the one we thought of, and I told this Mr. Dell in this letter that inasmuch as this name was patented and a suit been won over it, that we had better adopt some other name, and I proposed to him the name of "pancro-peptin" or pepsin.

178 By Mr. DYRENFORTH: The letter referred to by the witness is offered in evidence in behalf of the defendant, and is marked "Defendants' Exhibit Turner Letter." A transcript of the letter, excluding the printed letter-head, except the date line, is as follows:

CHICAGO, ILLS., *June 29th*, 1878.

Mr. Joseph Dell, 174 Race St., Cincinnati, Ohio.

DEAR SIR: Your letter of the 28th inst. received and contents noted. Your Mr. Clarke in this city requested me to inquire of my agent in New York city asking whether the word "lactropeptine" was copyrighted.

I give you as follows the answer of my agent Mr. Neyman. "Reed & Carnich established the N. Y. Pharmical Association and appointed Kidder & Laird agents for same but the concern afterwards dissolved. Kidder & Laird established for themselves and the N. Y. P. Association continued the business but Reed & Carnich still have some interest in it.

"The lactro-peptine is copyrighted and some English house tried to get around it and called it lactro-pepsin and was defeated in a suit brought against them."

I received a package of money by the express Co. and find $46.00 in bills, $1.30 in postal & $41.70 in silver making $89.00 which lacks $1.00 of being $90.00 the amount you say you sent how do you account for the difference.

I have written Whitall Tatum & Co. Philadelphia Pa. and W. McCully & Co. Pittsburg Pa. asking them as to whether they manufacture the size of bottle you ask for as soon as the answers are

received I will know what to do, if they do not manufacture any I will then have to order a certain size made for the pepsin trade.

I enclose you "pure pepsin" labels.

Very truly yours, JAMES TURNER.
B.

179 You propose the word lacto-pancreatin now I think that if the N. York house has beaten the English house by their using the word lactro-pepsin that there would be a good chance for them to beat us "don't you." Now allow me to name a word it is pancro peptin pepsin as you may decide.

Let me have your views at once & I will get it out any time you say.

Yours, &c., J. T.

The exhibit and transcript are objected — by counsel for complainant as immaterial and irrelevant and not sufficiently proved.

Q. 11. At the time you suggested to Mr. Dell in the letter which has been produced, the name "pancro peptin" or "pepsin" had you ever known the name to have been employed by any one else?

Objected to as immaterial and irrelevant.

A. I had not.

Q. 12. For what reason did you suggest the use of that particular name?

Same objection.

A. It was to express the nature of the ingredients I was making; I wanted to call it, as near as I could, by its proper name, the combination of the two.

Q. 13. What were the ingredients that you wanted to express by means of the name?

Same objection.

A. Pancreatin and pepsin.

Q. 14. What further was done, if you know, after you suggested this name to Mr. Dell in the matter of making and selling the compound?

Same objection, and also as leading and suggestive.

180 A. The next thing we did was to get bottles made and labeled.

Q. 15. Would you recognize one of the labels that were printed for this purpose, if it were shown to you?

Same objections.

A. I should.

Q. 16. Look at the label which I now show you, and if you recognize it, state what it is.

Same objection.

A. It is the same label as we got printed at that time.

By Mr. DYRENFORTH: The label identified by the witness is offered in evidence in behalf of the defendant, and is marked "Defendant's Exhibit Turner Pancro-pepsin Label."

The exhibit is objected to because it is immaterial and irrelevant and secondary.

Q. 17. When were these labels printed with reference to the time when you wrote to Mr. Dell suggesting the name for the compound?

Same objection.

A. I can't remember that very well, but I should say right away.

Q. 18. Was a large number or a small number of these labels printed?

Same objection.

A. Oh, there must have been a large number; I couldn't tell you.

Q. 19. Did you have any of them in your possession, and if so, what became of them?

Same objection.

A. I had lots of them in my possession until I moved away to Martinsville, and my son then took possession of the office, and he burnt up nearly everything that I had, books and all.

181 Q. 20. What, if anything, did you and the firm of Dell & Clarke do in the matter of manufacturing and selling the compound referred to on the label which has been offered in evidence?

Same objection.

A. At the time everything was ready to go ahead and we furnished them the materials (they were the chemists; I was not the chemist), Dell & Clarke got in trouble. Mr. Dell was in possession of a house in Cincinnati, and Mr. Clarke, who was his son-in-law, was running this house here, and while Mr. Dell was at Cincinnati Mr. Clarke went into bankruptcy here, and Mr. Dell came here and found the things so mixed up that he went into bankruptcy, too, and that finished our whole negotiations.

Q. 21. Then, so far as you know, was the compound which is designated upon the label which has been offered in evidence ever put upon the market?

A. No, sir.

Cross-examination by Mr. BROWN:

X Q. 22. Then the label "pancro-pepsin" printed by you was never actually used in trade upon the goods or preparation, was it?

A. Not as laid down in that label. There was a lot of other ingredients in that label which I didn't know anything about.

X Q. 23. Then this printed label which has been put in evidence is not the same as it was when you had your label printed, is it?

A. I never had any label printed before that, excepting for pepsin.

X Q. 24. And when you had the label containing the name pancro-pepsin printed, it did not state the other ingredients now mentioned in the label in evidence, did it?

182 A. I think that everything there was to be used in that label was in that label.

X Q. 25. If you know, state who had this particular label in evidence printed?

A. I paid for all of it. These men professed to be chemists; I merely furnished the pepsin and the pancreatin.

X Q. 26. And Dell & Clarke ordered the rest of the inscription to be placed on the label, did they?

A. I suppose they did.

X Q. 27. Where did this particular label in evidence come from before it was brought into this room?

A. I don't know, but Dell & Clarke might have had some of them.

X Q. 28. According to this label, the substance to which the name pancro-pepsin refers contains a many times larger quantity of sugar of milk than it does either of pepsin or pancreatin; is not that correct?

A. That is correct.

X Q. 29. Sugar of milk was the principal ingredient in comparison with any of the other ingredients, was it not?

A. Yes, sir.

X Q. 30. How did it happen that so much sugar of milk was put into the preparation?

A. The formula laid down by the American Pharmaceutical Association was nine pounds of sugar of milk to one pound of pepsin.

X Q. 31. Did you ever market any preparation called lacto-pepsin or lacto-peptin?

A. I had never put any up previous to this Dell & Clarke combination of anything else but the pepsin and sugar of milk, but when I made this arrangement with Dell & Clarke I then went on

183 and made pancreatin, and supposing it was going to go on with them to put the two together, I did mix quite a small quantity of the two together, and dealt it out as such, but I didn't keep on with it when they backed out with their failure; fell back on my old method of pepsin.

X Q. 32. That is, when you made your arrangement with Dell & Clarke, you manufactured this preparation combining pepsin, pancreatin, lactic acid, etc., and sold it under the name of lacto-pepsin for a short time, but when they failed you stopped. Is this correct?

A. Yes, this is correct. But I wasn't manufacturing lactic acid.

X Q. 33. What were the ingredients which you sold to them under the name of lacto-pepsin?

A. All the ingredients I turned over to them were pepsin and pancreatin.

X Q. 34. And then they added the other ingredients and called it lactopepsin, did they not?

A. I forgot all about the lactopepsin; I thought it was pancropepsin that you were referring to all the time.

X Q. 35. In the letter which you have introduced in evidence reference is made to an inquiry as to the word "Lactropeptine," and I have been asking you whether you ever manufactured any preparation under that name or under the name of lactopepsin. Did you?

A. No.

X Q. 36. Then, as I understand you, you originally intended to manufacture the preparation for Dell & Clarke under the name lactopeptine, but found that the name had been copyrighted by Reed & Carnich, and they had a suit with English parties regarding the right to the name and had beaten them, and therefore you concluded it best not to use such name or the name lactopan-
184 creatin, and instead suggested the name pancro-pepsin. Is this correct?

A. Yes, sir.

X Q. 37. How did you ascertain that there had been a suit on the name lactopeptin against English parties, and the suit had been sustained?

A. I found it out from the parties who had the suit themselves. It was between the two firms mentioned in that letter, which I can give you if you will let me look at it. Reed & Carnich and Kidder & Laird; I learnt from those two firms, as I found they both worked together, that they had had this suit with this English firm and beat them.

X Q. 38. What was the name of the English party?

A. I don't think I can give you that.

X Q. 39. Was the suit in this country or in England?

A. I don't know.

Redirect examination by Mr. DYRENFORTH:

R. D. Q. 40. In X Q. 32 you were asked as follows:

"That is, when you made your arrangements with Dell & Clarke you manufactured this preparation combining pepsin, pancreatin, lactic acid, etc., and sold it under the name of lactopepsin, for a short time, but when they failed you stopped. Is this correct?"

To this question you answered:

"Yes, this is correct, but I wasn't manufacturing lactic acid."

Later, in answer to X Q. 35, you answer that you never manufactured any preparation under the name of lactopepsin. Which of these statements is correct?

A. Are they cross-ways to one another? I don't quite understand this question that you put to me now. I don't see how I got led off from pancro-pepsin to lactopepsin. I am confessing that I don't understand the two questions and answers.

185 R. D. Q. 41. What name did you intend to use, or understand to be used, instead of lactopepsin?

A. I never had anything to do with anything but pancro-pepsin.

JAMES TURNER.

JAMES TURNER, recalled in behalf of the defendant:

By Mr. DYRENFORTH: I have recalled this witness to answer a question which is not properly redirect examination, and which I see that I did not ask definitely in the former examination.

Q. 1. At the time you wrote the letter which has been offered in evidence, and had the labels printed, a specimen of which has been offered in evidence, did you know or had you heard that William Warner or William Warner & Company, of Philadelphia, were putting upon the market a medicinal compound which was called "Pancreopepsine"?

A. I never heard of that name.

Q. 2. At the time referred to, had you ever heard or did you know that William Warner or William Warner & Company, of Philadelphia, or any one else, had ever put upon the market a medicinal compound called "Pancreopepsine" or "Liquid Pancreopepsine"?

A. Never heard of any one. Never heard the name.

JAMES TURNER.

186 SATURDAY, *January* 7, 1899—11 o'clock a. m.

Met by agreement of counsel.

OSCAR O. HUYCK, a witness produced in behalf of the defendant, being duly sworn, deposes and says, in answer to questions by Mr. Dyrenforth, as follows:

Q. 1. What is your name, age, residence and occupation?

A. Name, Oscar O. Huyck; forty-six years; Chicago; occupation, salesman for the Searle & Hereth Company.

Q. 2. How long have you been a salesman for the Searle & Hereth Company?

A. For nine years.

Q. 3. Are you acquainted with Mr. Joseph Dell, formerly of the firm of Dell & Clarke, druggists in this city?

A. Yes, sir.

Q. 4. Is Mr. Dell a druggist in this city at the present time?

A. Yes, sir.

Q. 5. Where is his place of business, if you know?

A. On Madison street; if you get the telephone book I can get the number.

Q. 6. Is it on West Madison street or East Madison street?

A. West Madison street.

Q. 7. Is he in partnership with any one at the present time, if you know?

A. I don't know of any partner, although the sign is "Dell & Company."

Q. 8. Do you know what has become of Mr. Clarke, his former partner?

A. He has been dead for several years.

187 Q. 9. Please look at the letter which I now show you and state whether you ever saw that letter before today, and, if so, when?

A. About eight or nine months ago. This letter was given me by Mr. Dell, and I turned the same over to Searle & Hereth Company.

Q. 10. What were the circumstances under which Mr. Dell gave you that letter?

A. When I went to work for the Searle & Hereth Company in the capacity of a salesman, I called on him and showed him an article of our manufacture called "Pancro-Pepsin," and he stated to me that he had a preparation of the same name in stock and showed me the same. That was all at that time. Being informed by Searle & Hereth Company that William R. Warner & Co. had tried to prevent the Searle & Hereth Company using the word "Pancro-Pepsin," I recalled the conversation with Mr. Dell some years previous, and went to see him in regard to it, and at that time he gave me this letter, also a label that he had used. That is all in regard to the letter. He also stated, if at any time the party made us any trouble in regard to the name, that I should come and see him.

Q. 11. Did you see Mr. Dell take this letter from his files?

A. Yes, sir.

Q. 12. Was the letter readily found by Mr. Dell?

A. He found several letters, and it took me about fifteen minutes to select one that had any bearing on the matter.

Q. 13. From whom, if you know, were the several letters which Mr. Dell found, as you have stated in your last answer?

A. From James Turner.

188 The letter which has been shown the witness and concerning which he has testified is "Defendants' Exhibit Turner Letter," M. S. M., N. P.

Q. 14. You have stated that Mr. Dell, at the time he gave you the letter, also gave you a label. What did you do with that label?

A. I turned it over to the Searle & Hereth Company with the letter.

Q. 15. Look at the label which I now show you, and state how it compares with the label which was given to you by Mr. Dell, and which you turned over to the Searle & Hereth Company.

A. It is identical, and to the best of my knowledge, the same label he gave me.

The label shown the witness is "Defendants' Exhibit Turner Pancropepsin Label," M. S. M., N. P.

Cross-examination waived.

OSCAR O. HUYCK.

189 *Complainant's Evidence in Rebuttal.*

United States Circuit Court, Northern District Illinois.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY ET AL. } In Equity.

Depositions taken pursuant to notice and by consent, before Orange J. Griffin, notary public, acting as special examiner under the 67th rule of equity as amended, the depositions being taken on the typewriter by Miss Ella B. Wright, New York city, New York College of Pharmacy, 115 West 68th street, April 4th, 1899, 10 a. m.

Appearances: Frank T. Brown, Esq., in behalf of complainant; Philip C. Dyrenforth, Esq., in behalf of defendants; notary public, stenographer and the witness named below; also Mr. S. F. Hereth.

VIRGIL COBLENTZ, being duly sworn, deposes in answer to interrogatories propounded to him, as follows, to wit:

Q. 1. What is your name, age, residence and occupation?

A. Virgil Coblentz; age, thirty-eight; residence, New York city; a chemist by profession, professor of chemistry New York College of Pharmacy.

Q. 2. State your education and experience in the line of your profession.

A. My father being an apothecary, I was at a very early age initiated in the art of pharmacy. Graduate of Wittenburg college,
190 Philadelphia College of Pharmacy, three years lecturer in toxicology in the Cincinnati College of Pharmacy and for eight years lecturer in chemistry in the New York College of Pharmacy; studied chemistry in the Universities of Goettingen, Strassburg, Wuertzburg, Munich; took the degree of doctor of Philosophy in the University of Berlin. Hold the honorary title of master in pharmacy, conferred by the Philadelphia College of Pharmacy. Fellow of the Chemical Society of London; also Berlin, etc. Author of a treatise on the practice of pharmacy; also one on modern synthetic preparations.

Q. 3. State what experience, if any, you have had in teaching chemistry or pharmacy.

A. A term of about sixteen years.

Q. 4. Where?

A. In Cincinnati and New York.

Q. 5. How long have you been professor of chemistry in the New York College of Pharmacy?

A. About nine years.

Q. 6. It is in evidence that the complainant has used for many years as his trade-mark upon a certain preparation the designation Pancreopepsine, and the defendants have used as a designation for their preparation the word Pancro-Pepsin, each preparation being

used for digestive purposes. Please compare these words and state, in your opinion, whether they are distinctly different or practically the same.

By Mr. DYRENFORTH: Objected to as not proper rebuttal.

A. On comparing the words side by side, I would say they are essentially the same.

Q. 7. Please state whether or not, in your opinion, physicians, pharmacists and the general public would be apt to distin-
191 guish between these two names when used on digestive preparations or confound them one with the other.

Same objection, and further, as leading.

A. Owing to the close similarity of the names, it would be very confusing, particularly for dispensing pharmacists, to distinguish one from the other; in fact, I myself, dispensing a prescription and not being thoroughly acquainted with the exact distinctive wording of the two preparations, might dispense one for the other, or mistake one for the other.

Q. 8. If you saw the mark or designation Pancreopepsine or the designation Pancro-Pepsin upon a bottle or package, would you, as a chemist and pharmacist, be able to determine definitely the principal ingredients or constituents of the medicine to which these names are given?

Objected to as leading and incompetent and immaterial.

A. I would not.

Q. 9. Please state, in view of your education and experience, whether you think pharmacists or physicians generally would, by these designations just above referred to, understand of what ingredients or constituents the preparation was composed.

Objected to as incompetent, immaterial and irrelevant.

A. From the title so given, no one would be able to state the composition except the manufacturer himself.

Q. 10. Professor Haines, a witness produced in behalf of the defendants, has testified that the designations Pancreopepsine and Pancro-Pepsin conveyed to his mind the understanding that the chief constituents of the preparation referred to are pancreatin and pepsin. Please give us your opinion on this, with reference to the so-called ingredient pancreatin, and your reasons for any opinion you may express.

192 A. In the first place, the title Pancreopepsine is distinctively suggestive to me that the preparation is used as a digestive ferment. As regards the term pancreo or pancro, a chemist or pharmacist would be unable to say or specify what preparation could be meant thereby. The name pancreo might refer to some preparation made from the gland, for example, a glycerole, elixir or infusion, it might refer to pancreatic juice, or it might refer to any one of the many preparations now upon the market, sold under the so-called name "pancreatin," or this might be a preparation

prepared from an intregal portion of the so-called "pancreatin," or the word might refer to the presence of a preparation of squills, the old name of which was pancratium. To explain the term "so-called pancreatin," I would say that there is no such thing known to chemists or, rather, physiological chemists, under the name of pancreatin, this being a distinctive commercial name for various proprietary preparations prepared by various processes from the pancreatic gland.

Q. 11. Professor Haines has testified that there is a definite substance known to chemists and pharmacists by the name of pancreatin, and that this substance uniformly and necessarily embraces the active principles of the pancreatic juice, including all three of the ferments trypsin, amylopsin and steapsin. Please give your opinion on this point, and reasons therefor, and any authorities to which you may desire to refer.

A. The title pancreatin, as before stated, is unknown to all authorities on physiological chemistry. The name fails to appear either in index or text of such authorities as Hoppe, Seyler, Hammersten, Bunge, Lehman and others. This name has been indiscriminately applied to various ferments found in pancreatic juice, and even to the juice itself; the following citations will ex-
193 plain themselves. First, the Standard Dictionary of Funk & Wagnalls states the following: "Pancreatin, a proteid compound, contained in the pancreas, probably one of the active ferments of the pancreatic juice." United States Dispensatory, 17th edition, 1894: "The term pancreatin has been variously used for many different preparations from the pancreatic gland and has long been popularly employed for the purpose of distinguishing preparations more or less of the nature of extracts made from the gland. Besides its digestive properties, the pancreatic juice has the power of emulsifying fats. This emulsifying property is possessed by alkaline aqueous infusion of the gland, and is therefore present in properly prepared pancreatic extracts. It is independent of any of the ferments and is probably dependent on the presence of a peculiar form of casein or albumin." I would add in a way of explanatory matter to this that the Standard Dictionary specifies that pancreatin may be any one of several ferments. The Dispensatory specifies that it may stand for many different preparations. United States Dispensatory, 13th edition, 1872. In the index pancreatin refers to the pancreatic emulsion, under which we find the following: "The name of pancreatin has been conferred on the pancreatic juice itself, which was brought to the notice of medical men by Dr. G. Harley so early as 1858 as uniting in itself the properties of all the digestive fluids."

Hager Handbuch der Pharmaceitischen Praxis, 1884. This work is recognized as a standard work of reference by pharmacists in Europe. "Kuehne nennt das Eiweiss Verdauende Ferment im Pankreassafte Trypsin. Dieses soll im sauren Magensafte seine Wirkung einbuessen. Heidenhain nennt dasselbe Ferment Pankreatin." Translated, Kuehne names the albumin-digesting ferment in

pancreatic juice trypsin. Heidenhain calls this same ferment
194 "pancreatin." Fehling's Hanworterbuch der Chemie, date 1886, gives the following title: "Trypsin (pancreatin.)" I call attention here to the heading trypsin, pancreatin being used as a synonym. Handworterbuch Chemie, Professor Dr. Ladenburg. Volume 4, page 116, Trypsin (Frueher Pankreatin). I refer here in this authority under heading trypsin the author states in parenthesis as "formerly known as pancreatin." As before stated, pancreatin is simply a commercial term designating various digestive preparations or fermentive principles obtained by various processes known only to the manufacturers. This last clause refers to what is known now commercially as pancreatin. The title pancreatin cannot be placed on the same level as that of pepsin, owing to the presence in the pancreatic juice of several ferments, each of which possesses distinctive digestive properties, that of digesting albumin, that of saccharifying starch, that of hydrolizing fats, also that of emulsifying fats. There may be still other principles present which may at some future time be separated and identified.

By Mr. DYRENFORTH: So much of the foregoing answer as refers to or relies upon authorities of recent date or of dates materially later than the alleged date of adoption by the complainant of the word Pancreopepsine as a trade-mark for his digestive compound is objected to as incompetent and immaterial.

Mr. BROWN: A larger number of authorities cited by Prof. Haines on this point are of the later date.

Q. 12. What is the standing of the several publications which you have referred to in your preceding answer?

A. Of these various works, the English are recognized as foremost authorities upon this subject in this country, while the for-
195 eign works are the highest authority and are constantly used as authorities in the various universities of Europe.

Q. 13. Have you consulted any other authorities on this point?

A. I have.

Q. 14. Only a few or many?

A. Many authorities.

Q. 15. As a result of your investigation on this point, do you conclude with Prof. Haines that the term pancreatin has a fixed and definite meaning and refers to a specific substance, combining all the active principles of the pancreatic juice or not? State your reasons.

A. As the result of my consultation of various authorities, I find that the word pancreatin has been indiscriminately applied to various ferments, even preparations made from the pancreatic gland. Some authorities have applied this term to the albumin-digesting principle, others to the starch-digesting principle, others to a liquid extract, still others apply it to some principle not specifying which it is or its specific properties. It is a question as to whether what is known commercially under the name pancreatin represents all or a part of the digestive powers of the pancreatic juice. Such titles as pancreatin are used by chemists for defining chemical entities or

compounds of definite uniform composition and properties. This is not complied with under what is known commercially as pancreatin. I therefore consider that the term pancreatin cannnot be placed in the same category with definite chemical compounds or principles.

Q. 16. Prof. Haines, in answer to question No. 13, refers to an early number of the American Journal of Pharmacy and also the English medical journal Lancet and the London Journal of Pharmacy, an article in the American Journal of Pharmacy for 1873, and
196 seems to indicate that these articles recognize the term pancreatin. Please state whether you have examined these articles and find that they recognize the term as stated by him or whether they refer to individual opinions of certain persons.

Objected to as leading.

A. These articles are simply an explanation of various liquid preparations obtained from pancreatic gland and bear with them the individual views of the writers.

Q. 17. Prof. Haines in his deposition stated that the term pancreatin necessarily included or signified all the active principles, including the three ferments, trypsin, steapsin and amylopsin, and that these ferments could not be isolated one from the other. Please state whether you have investigated this subject and the result of such investigation.

A. Each of the three above-mentioned ferments has been isolated; first, trypsin was isolated by Danilewsky in 1862; amylopsin by Von Wittich in 1869, and steapsin by Paschutkin in 1873. As authorities I would cite Beilstein's Organische Chemie, Handwoeterbuch der Chemie, by Ladenburg, also various text-books on physiological chemistry cite methods for the isolation of each. Some of these, if not all, can be had in the market at the present time. From the various authorities which I have already cited we find the title pancreatin has been indiscriminately applied to various preparations and substances and that the highest authorities, that is, those on physiological chemistry, make no recognition of the word whatever. It is also in contradiction to chemical usage to apply a title such as pancreatin to a mixture of various substances as placed upon the market by manufacturers, the composition of which being unknown.

Q. 18. Dunglison's Dictionary of 1874 states as follows:
197 "Pancreas secretes the pancreatic juice. When this juice is mixed with amylaceous matters it converts them into dextrin and glucose. Its great use appears, however, to be to emulsify fatty matters by virtue of a peculiar albuminoid principle—pancreatin—which it contains." Do you understand from Dunglison that the name pancreatin refers to one principle or to a mixture of the principles, as Prof. Haines says?

A. Dunglison very clearly names this peculiar albuminoid principle which he cites pancreatin. Dunglison also calls attention, in addition to its emulsifying properties, — its amyloptic properties. According to this, pancreatin from Prof. Haines' point of view should

consist of fat emulsifying principle and saccharifying principle only.

Q. 19. I don't think you quite understand my question. Dunglison, as you have stated, says the pancreatic juice converts amylaceous matters into dextrin and glucose and additionally, by reason of an albuminoid principle which he calls pancreatin, emulsifies fats. Prof. Haines states that the substance which he calls pancreatin not only has the peculiar albuminoid principle, but also the active principles of the three ferments, trypsin, steapsin and amylopsin, which convert starch into sugar, etc. Now, are Dunglison and Prof. Haines in agreement or in opposition?

A. They are in direct opposition.

Q. 20. Dunglison states that the power of emulsifying fats possessed by the pancreatic juice is due to a peculiar albuminoid principle and the United States Dispensatory attributes the emulsifying power to "a peculiar form of casein or albumin" and further says that this peculiar emulsifying principle is independent of the three ferments. Prof. Haines, when asked regarding this in question 175, says these two authorities do not agree at all on this point and that there is necessarily no connection whatsoever between an
198 albuminoid principle, mentioned by Dunglison, or a peculiar form of casein or albumin mentioned by the United States Dispensatory. What have you to say as to this?

Objected to as immaterial.

A. The terms "a peculiar form of casein or albumin" and "a peculiar albuminoid principle" are identical, both referring to a compound belonging to the class of bodies known as albumins. To me it is very evident that Dunglison and the United States Dispensatory refer to the same albuminoid principle.

Q. 21. Prof. Haines, in comparing the National Dispensatory which he quotes and the United States Dispensatory, to which we referred him, gives them a practically equal standing, although he states he preferred the National Dispensatory. Please state the comparative standing of these two works among chemists, pharmacists and physicians.

A. Among chemists, pharmacists and physicians the United States Dispensatory has been always given the preference, it having gone through seventeen editions, as an evidence of its popularity, while the National has now reached its fifth edition. I give the United States Dispensatory the preference because its chief editor, Prof. Remington, by virtue of his position as vice-chairman of the United States Pharmacopœia Commission and his high standing in the pharmaceutical profession, is in a better position to speak authoritatively upon these subjects than the present authors of the National Dispensatory. Prof. Remington's associates are of the highest standing in the chemical and medical profession.

By Mr. DYRENFORTH: The foregoing question and answer are objected to as immaterial, particularly in so far as the answer seeks

to show which is the more respectable of the two highly respected authorities.

199 Mr. BROWN: Prof. Haines drew a comparison and it is now being answered. I have never heard the National Dispensatory characterized before by any one as a highly respectable authority.

Q. 22. In the various colleges with which you have been connected or associated, which of the two works is most relied on and preferred?

Same objection.

A. The United States Dispensatory has always been given the preference, because of the more thorough character of its articles, and it has been kept apace with modern investigations, which cannot be said as regards the last edition of the National Dispensatory.

Q. 23. It has been said the United States Pharmacopœia is the basis of the United States Dispensatory. If there is any difference, state which gives the fullest information and is to be preferred.

Objected to as immaterial.

A. The office of the Pharmacopœia is simply that of a codex giving a list of the titles and general description of the various substances introduced. In addition to these, formulæ for the preparation of various medicines. The office of the Dispensatory is that of a commentary explaining the origin, preparation, properties, uses, and, in fact, all information that is possible to compile concerning each of these, space not admitting such material in the Pharmacopœia. The Dispensatory gives information concerning a great many substances which are not found in the Pharmacopœia. It might be said to be an *encyclo*pædia of pharmacy, chemistry, and materia medica.

Q. 24. Are they edited by the same or different parties?

Same objection.

A. The editors of the United States Dispensatory are among the editors of the Pharmacopœia.

200 Q. 25. Webster's latest Unabridged Dictionary states that pancreatin has been applied by some authors as a name for trypsin, by others as a name for steapsin, and still by others as a name for the ferment, amylopsin. Is Webster's Dictionary regarded as a reliable authority as far as it goes on matters relating to medicine, chemistry, and pharmacy?

By Mr. DYRENFORTH: Objected to as incompetent and immaterial, particularly in view of the date of the latest edition referred to and the absence of any statement as to when the separate constituents referred to as thus designated.

A. It is.

Q. 25. Prof. Haines cites the American Text-book of Physiology on this question of the meaning of pancreatin and rather indicates

that such a work is more reliable than the other works referred to, such as the dictionaries and dispensatories; what is your opinion on this point?

A. Various dictionaries and dispensatories and even the writers on physiology must necessarily derive their information upon the chemistry of the human organism from the physiological chemist. A physiologist is not necessarily a physiological chemist. The physiological chemist devotes his life study to the solution of the chemical problems involved in the vital processes. I would class the authority of the physiologist on equal basis with that of any medical authority. Physicians from profession are not always necessarily professional chemists. The chief authority, in my opinion, upon this subject is that of the physiological chemist and not physiologist.

Q. 26. Then is it your opinion that text-books on physiology compare favorably or unfavorably as authorities on this question of dictionaries of chemistry or United States Dispensatory?

A. A text-book on physiology would, in my mind, com-
201 pare unfavorably with a dictionary or dispensatory, for the simple reason that the various articles incorporated in these books are written by well-known specialists, each for his own branch, where a text-book in physiology attempts to cover the same ground, but represents the views of one individual. In these days of modern progress it is an absolute impossibility for any single man to become expert on widely differing fields of chemistry and medicine. For this reason a dictionary would necessarily represent a higher authority upon these subjects.

Adjourned for recess for luncheon.

Q. 27. Have you examined the American Text-book on Physiology cited by Prof. Haines and do you find any such term as pancreatin in the index or the text?

A. I have examined said text-book and fail to find the word pancreatin either in the index or text.

Q. 28. Prof. Haines, in his answer No. 13, says that the United States Dispensatory, 13th edition, has considerable articles on both pepsin and pancreatin. State whether you have examined this work and whether Prof. Haines' statement is correct.

A. I find the term pancreatin in the index refers me to an article entitled "Pancreatic emulsion," under which we find that the name of pancreatin is used, stating that it was conferred by Dr. G. Harley on the pancreatic juice itself.

Q. 29. Aside from this reference and the name given by Dr. Harley, do you find any article given on pancreatin or that name in such work?

A. Nowhere else in this article is the name pancreatin used, leaving us to infer that pancreatin refers to a pancreatic emulsion.

Q. 30. Reviewing all the authorities, including both those
202 cited by Prof. Haines and those referred to by you in your examination, please state whether you find any legitimate

warrant for the term pancreatin applied to a definite chemical substance.

A. Among all the works which I have consulted, I find no warrant for any one to apply the name pancreatin to a definite chemical substance as it has been claimed to be.

Q. 31. According to the weight of the best authority, can it be told certainly by any chemist or pharmacist what the so-called pancreatin is?

A. No, it cannot. I have already cited a number of authorities showing that this word or title has been applied indiscriminately to various preparations, products and ferments. This term being unknown among scientific chemists as a definite entity or chemical compound.

Q. 32. Prof. Haines has stated that the prefix pancreo cannot be derived from the word pancratium, but is certainly derived from pancreatin because the "*e*" of the prefix pancreo is not in pancratium and is in pancreatin, and for other reasons to which I will hereafter refer. What have you to say as to the correctness of this statement of Prof. Haines'?

A. Prof. Haines' statement is illogical, because if pancreo cannot be derived from pancratium because it contains an "*e*," then it could not be derived from pancreatin, for the reason that pancreatin does not contain an "*o*."

Q. 33. Prof. Haines also says that the word pancratium is not recognized as referring to a plant or medicine, having reference to digestion, and therefore the prefix pancreo in the word Pancreopepsine could not refer to pancratium. If you have investigated this subject, please to state your conclusion.

A. The term pancratium is an old term or designation for the squill. If a preparation should contain an extract of this
203 drug, there would be no rule which would prevent us from employing any portion of the term pancratium as a prefix. Commecial titles being designated with a view to simplicity and euphony.

Q. 34. Prof. Haines says that the name pancratium does not refer to a medicinal agent useful in digestion, and therefore an abbreviation of it could not be associated with pepsin. What have you to say as to this?

A. I have before said it is a well-known fact that pancratium refers to squills and that squill while administered in small doses acts by virtue of its irritating properties as a digestive stimulant, causing a profuse secretion from those glands which secrete the digestive fluid. I have dispensed and seen various prescriptions in which squill has been used in conjunction with digestive ferments.

Q. 35. You have stated that the prefix pancreo in Pancreopepsine might also indicate the origin rather than describe a substance. In such case what would be the origin?

A. The pancreatic gland.

Q. 36. What is that gland named?

A. The pancreas.

Q. 37. Now in law it is perfectly proper for a trade-mark to indicate the origin if it does not describe the ingredient itself, and I therefore ask you whether it is more natural that the prefix pancreo should refer to the pancreas or to the so-called pancreatin or the pancreatic juice?

Objected to as inaccurate and otherwise incompetent.

A. In tracing the origin of the word pancreo I would be led to judge that it was derived from pancreas, eluding the two letters "*as*" and substituting an "*o*." If it was derived from pancreatin and were that for sake of argument a chemical compound or definite principle, it would lose its identity as such through the elimi-
204 nation of the ending "*in*" including a "*t*." Chemists employ the endings "*in*" to designate active principles of various substances, it being understood that these are definite chemical compounds of uniform composition.

Q. 38. Euphonically considered, is the prefix pancreo closer to pancreas or pancreatin?

Objected to as indefinite.

A. To pancreas.

Q. 39. If the term Pancreopepsine was a commercial designation or trade-mark, as it is termed, would the rule of chemistry or euphony be most apt to be observed in its formation?

A. Most certainly rules of euphony. It is a chief object in designing names for proprietary preparations to make them as euphonic as possible. No attention is paid whatever to rules of chemistry in this particular. Many cases may be cited where a valuable medicinal product has failed utterly from a commercial standpoint from the improper selection of a title, particularly be it descriptive or a long chemical title, where, on the other hand, an almost worthless preparation has become a great financial success through the fortunate selection of a euphonic title, which might be easily retained in the memory.

Q. 40. Have you been able to find in the United States Pharmacopœia, the United States Dispensatory or any chemical, pharmaceutical or medical work, either of the names Pancreopepsine or Pancro-Pepsin or the prefix thereto?

Objected to as immaterial.

A. I have searched the literature, both ancient and modern, foreign and domestic, and fail to find any words which have the least resemblance to the above mentioned.

Q. 41. Then, on the whole, do you conclude that these
205 terms Pancreopepsine and Pancro-Pepsin are descriptive titles or fanciful trade names?

Objected to as leading.

A. I consider that the above terms are simply fanciful titles, leaving one to infer their medicinal properties.

Q. 42. In the United States Dispensatory, 17th edition, it is stated

that the pancreatic juice has three different ferments which, as before stated, are trypsin, amylopsin and steapsin; and besides "and independent of any of the ferments," it has an emulsifying property "probably dependent on the presence of a peculiar form of casein or albumin." Prof. Haines says that what he calls pancreatin combines the active principles of the three ferments and that it will emulsify fats. Please state whether this opinion of Prof. Haines is in accord with or in opposition to the statement of the United States Dispensatory, just referred to.

A. Prof. Haines' statement is in opposition to this statement of the United States Dispensatory. The Dispensatory cites the presence of a principle which possesses a distinctive power peculiar to itself. This principle is not included in Prof. Haines' category of the active principles of the so-called pancreatin.

Q. 43. You have before testified that Dunglison's Dictionary of 1874 agreed with this statement just made from the United States Dispensatory. Please state whether Dunglison's Dictionary is a recognized authority or not.

A. Dunglison's Dictionary, like all standard works of reference, can be cited as a most excellent authority. The statements of Dunglison's Dictionary coincide with that of the United States Dispensatory.

Q. 44. State whether or not a chemist could make a pancreatic extract from which the three ferments above referred to were
206 excluded and of which the active element was this albuminoid principle referred to by the United States Dispensatory as the agent obtained from the pancreas for emulsifying fats.

A. I believe he could.

Q. 45. And in such case the pancreatic extract might be generally indicated by the prefix pancreo, while Prof. Haines' so-called pancreatin would be absent, would it not?

Objected to as purely speculative and hence incompetent.

A. It could.

Q. 46. You have stated that the commercial term pancreatin is uncertain in its meaning, because it refers indifferently to any one of many different preparations made by different processes. In this connection I ask you if the preparation known as the pancreatic glycerole contains all three of the ferments trypsin, steapsin and amylopsin, which Prof. Haines says are always present in pancreatin?

Objected to as immaterial.

A. Commercial pancreatin is of variable composition, which various assays have shown. Its composition depending on the process employed in its manufacture. These processes employed by manufacturers are known only to themselves, there being no guarantee as to the exact nature of its contents. The composition of pancreatic glycerole has been simply assumed to be as above stated.

Q. 47. Do the authorities hold that all three of the ferments in the pancreatic juice are soluble in glycerine?

Same objection.

A. Beilstein states that pure trypsin is insoluble in glycerine. (Volume 3, page 1308.)

Q. 48. What is the reputation of Beilstein as an authority?

A. Beilstein is considered the highest authority known on the subject of organic chemistry.

207 Q. 49. According to this, would a pancreatic glycerole contain trypsin?

Same objection.

A. If the statement that trypsin is insoluble in glycerine is accurate, which we assume from the authority quoted, we could infer that it would be absent in a glycerole.

Q. 50. Then if a manufacturer used in his preparation of Pancro-Pepsin a pancreatic glycerole he would, according to this eminent authority, exclude the ferment trypsin, and therefore would not include the so-called pancreatin which Prof. Haines describes in his deposition. How as to this?

Same objection.

A. If a manufacturer in the preparation of Pancro-Pepsin would use a pancreatic glycerole, we would infer from the above authority quoted trypsin might be absent. According to this the pancreatin of Prof. Haines would contain amylopsin and steapsin.

Q. 51. Prof. Haines says that pancreatin must contain all three of the ferments, and in the case indicated in the preceding question as the compound contains only two and omitting trypsin, could it, as Prof. Haines states, accurately describe his so-called pancreatin containing all three?

Same objection.

A. It could not.

Q. 52. It is in evidence that one of the Searle & Hereth preparations labeled with the designation Pancro-Pepsin contains underneath a description of the assumed ingredients in the preparation, and Mr Hereth has testified that this description is given in addition to the name so that physicians and pharmacists could "intelligently dispense it." If the name Pancro-Pepsin was in itself descriptive

208 of its ingredients, as Prof. Haines holds, would it be necessary to recite for the benefit of the intelligence of physicians and pharmacists its ingredients, in addition to giving the same?

Objected to as leading and incompetent.

A. It would not.

Q. 53. In your opinion, as a chemist and pharmacist, is the statement of Prof. Haines that Pancro-Pepsin with certainty described the principal ingredients consistent with or in opposition to the statement of Mr. Hereth and notwithstanding that name he gave a description of his ingredients so that physicians and pharmacists could intelligently dispense it?

Objected to as leading, argumentative and otherwise incompetent.

Mr. BROWN: When a question hits a counsel pretty hard he is apt to state, not only all the questions he can think of, but to endeavor to reach out for the remainder by such general terms "and otherwise."

Mr. DYRENFORTH: I had no expectation of annoying or offending Mr. Brown by my last objection.

Mr. BROWN: Not only do you avoid annoying and offending me, but please me.

A. The statement of Prof. Haines that the term Paccro-Pepsin was accurately descriptive is certainly in opposition to the statement of Mr. Hereth.

Q. 54. Would it be possible for chemists, pharmacists or physicians to tell from the name Pancreopepsine or the name Pancro-Pepsin whether there was contained in the preparation to which the name was applied a pancreatic tincture, a pancreatic glycerole, a pancreatic extract embodying only the peculiar albuminoid principle referred to in the United States Dispensatory, a pancreatic extract embodying the ferment trypsin alone, a pancreatic extract
209 embodying the ferment amylopsin alone, a pancreatic extract embodying the ferment steapsin alone, or what?

Objected to as incompetent and immaterial.

A. From the term Pancreopepsine or Pancro-Pepsin a chemist, physician or pharmacist would not be able to state whether any one or all of the above-mentioned preparations was included.

Q. 55. The term pancreazymose is recognized in Gould's Medical Dictionary. The prefixes pancreo and pancro might be derived from this term as well as from the so-called pancreatin, might they or not?

Objected to as leading and otherwise incompetent.

A. Certainly.

Q. 56. The designation pancreatogen is recognized by authorities. Please state whether or not the prefixed pancreo or pancro could be derived from this word.

Same objection.

A. For trade purposes it can, because there are no general or chemical rules governing the coinage of trade titles.

Q. 57. Please state whether or not there is any rule which would apply to the derivation of these prefixes just mentioned from the so-called pancreatin that would not as well apply to the term pancreatogen?

Objected to as incompetent and immaterial.

A. You would have just as much right to derive the word Pancreopepsine from pancreatogen as pancreatin, for by eliding the ending "ogen" we remove just as much meaning from the word

from a chemical standpoint as eliding "tin" from pancreatin. As before stated, there is no authority for the application of chemical rules of nomenclature to commercial proprietary preparations.

Adjourned until 10 o'clock Wednesday morning.

APRIL 5TH—10 a. m.

Met pursuant to adjournment.

210 Parties present as before. The witness, after reviewing his deposition thus far given, desires to make the following addition to his answer No. 12:

In explanation of my answer to question 12 I wish to state that the foreign works quoted, as well as many others of the same class, are quoted by our American authorities. We find, for example, in the American Text-book of Physiology many references to European authorities. The same might be said of all our standard works on chemistry and physiological chemistry.

Cross-examination by Mr. DYRENFORTH:

X Q. 58. In your answer to question 2 you state that your father was an apothecary. Where was his place of business?

A. Springfield, Ohio.

X Q. 59. Have you been in the United States all your life, except when you were a student in Europe?

A. I was.

X Q. 60. Have you ever seen specimens of the substance called pancreatin?

A. I have seen specimens of the so-called commercial pancreatin.

X Q. 61. Have you ever seen a specimen of pancreatin which was not the so-called commercial pancreatin?

A. No, I have not.

X Q. 62. When did you first see what you have called commercial pancreatin?

A. It is certainly a number of years ago; the exact time I could not specify.

X Q. 63. Where did you first see it?

A. I presume it was when I was in business in Springfield. I am not very positive in regard to this.

X Q. 64. When did you discontinue your business in Springfield?

A. I think it was in 1887.

211 X Q. 65. Is pancreatin, and please understand that by the term I always intend to signify what you have designated "commercial pancreatin," unless I signify otherwise, a substance which is extensively manufactured in the United States?

A. This substance is manufactured in the United States.

X Q. 66. By whom, if you know, is pancreatin most extensively manufactured in this country, I mean in what classes of business?

A. The so-called pancreatin is prepared by some firms who are engaged in the wholesale slaughtering of animals, such as Armour & Company, Swift & Company, also by various drug firms, some manufacturers making a specialty of fermentive products.

X Q. 67. Do you know which drug firm manufactures pancreatin most extensively in the United States?

A. That would be a matter of statistics, for each individual firm has a different opinion as regards his comparative output.

X Q. 68. Name some of the drug firms which, to your knowledge, manufacture pancreatin extensively.

A. It would be necessary for me to make inquiries to settle this question.

X Q. 69. Will you be able to make such inquiries in the course of today?

A. I would not.

X Q. 70. Do you know whether pancreatin is manufactured and sold by the pharmaceutical house of Parke, Davis & Company, in Detroit?

A. There is a preparation upon the market bearing their name, I believe; whether they manufacture it or not I am unable to say.

X Q. 71. Is that substance what you have designated commercial pancreatin?

212 A. I understand this preparation to represent commercial pancreatin.

X Q. 72. Do you know whether or not a preparation of the same general nature is put upon the market bearing the name of Fairchild Bros. & Foster, manufacturers of digestive ferments?

A. Messrs. Fairchild Bros. & Foster put upon the market a preparation bearing the same title; whether they are physically or chemically alike is unknown to me.

X Q. 73. Is the preparation which is put upon the market by Fairchild Bros. & Foster what you have designated commercial pancreatin?

A. I presume it would belong to the same category.

X Q. 74. Do you know whether pancreatin is also put upon the market by Sharp & Dohme, manufacturing pharmacists of Baltimore and New York?

A. I think it is.

X Q. 75. Is that preparation also what you have designated commercial pancreatin?

A. I presume it would belong to the same category of pancreatins.

X Q. 76. How about John Wyeth & Bro., of Philadelphia? Does not that firm also put pancreatin upon the market?

A. I do not know. At least, to my knowledge, I have never seen their preparation.

X Q. 77. Do you know whether the firm of Wm. R. Warner & Company, of Philadelphia, put pancreatin on the market?

A. I do not.

X Q. 78. Do you know whether or not the Searle & Hereth Company, of Chicago, put pancreatin on the market?

A. I do not recollect as ever having seen a sample of their preparation.

213 X Q. 79. Have you any commercial pancreatin at the present time in the New York College of Pharmacy?

A. I think we have some specimens.

X Q. 80. Are those specimens what you have designated commercial pancreatin?

A. They are.

X Q. 81. Do you know whose product they are?

A. I could not recall the manufacturers of all, for I have had such a variety of specimens from time to time and I have never paid any attention to the name of the manufacturer, for in lectures I scrupulously avoid naming the manufacturers of various products exhibited, particularly if these should be competing firms.

X Q. 82. Can you ascertain the names of manufacturers which are on the specimens of pancreatin in the College of Pharmacy at the present time?

A. I could.

X Q. 83. Will you kindly do so?

A. I present two specimens which were procured at once; others can be shown later if desired.

X Q. 84. I notice that one of these specimens which you have produced is marked with the name of Fairchild Bros. & Foster, New York, and the other bears the name of Reed, Carnrick & Andrus, New York; is that correct?

A. It is correct.

X Q. 85. I shall be glad to have you, as soon as you have an opportunity, produce such other samples of pancreatin as you have at the present time in this college.

A. I will do so.

X Q. 86. Is there any free dispensary connected with this institution?

A. There is not. This institution is strictly a college of pharmacy.

X Q. 87. Is commercial pancreatin, as you call it, a sub-
214 stance that is commonly kept in stock by prescription druggists?

A. It is.

X Q. 88. Is pancreatin a substance which is extensively prescribed by physicians?

A. To what extent I do not know. It varies in different localities.

X Q. 89. When a physician prescribes pancreatin and the prescription druggist fills the prescription, what kind of pancreatin do they use? I mean does he use commercial pancreatin?

A. Physicians in prescribing commercial pancreatin generally specify some particular brand. If they leave the selection of brand to the discretion of the druggist he would be most likely to dispense that brand which would yield him the greatest profit.

X Q. 90. Do you know of any place in the United States where any pancreatin is manufactured which is not what you have designated commercial pancreatin?

A. If I were acquainted with the various secret methods employed by the various manufacturers I might be able to answer this question more intelligently.

X Q. 91. Is not pancreatin, or, as you have designated it, com-

mercial pancreatin, a staple product in the United States, manufactured in large quantities by various manufacturers and to be found in stock in all or nearly all the drug stores of this country? Of course in answering this question you are unable to speak from personal inspection, but I ask you to answer as well as you can from the knowledge which your position gives you?

Question objected to as calling for hearsay.

A. The so-called commercial pancreatin is to be found on the shelves of nearly all drug stores throughout the country; therefore it must be manufactured in large quantities.

215 X Q. 92. What, if you know, is the chemical composition of pepsin?

A. It belongs to the class of unorganized soluble ferments; in a restricted sense to the class of albumins. No chemical analysis of it can be made owing to the impossibility of obtaining it in absolutely pure condition such as would be necessary for making an ultimate analysis.

X Q. 93. Is the pepsin which is upon the markets of the United States what you would designate commercial pepsin?

A. Not necessarily. Pepsin is generally recognized by all authorities to be, when properly prepared, of uniform composition. Of course among the commercial pepsins or pepsins of the market there is considerable variance as regards their digestive powers.

X Q. 94. Do you lecture in the New York College of Pharmacy on the subject, among others, of digestive ferments?

A. I do.

X Q. 95. Have you written on the subject for publication?

A. I have done a considerable amount of work in the comparative estimation of the digestive value of these different ferments, but always for private parties. Also indirectly for the Pharmacopœia Commission.

X Q. 96. Have you ever personally made analysis of pancreatin for the purpose of isolating the constituent ferments?

A. My work on the pancreatin has always been that of comparative assays of various samples as regards their saccharifying, albumin digesting and emulsifying powers, for the isolation of any one constituent was considered unnecessary.

216 X Q. 97. Then you are able to say of your own knowledge whether any one has ever absolutely isolated any one of the constituent ferments from the others, and by the word absolutely I mean in such separate purity that no part of either of the others were present in it?

Objected to as immaterial and irrelevant and not cross-examination.

A. I have already answered this question under question No. 17. I have cited the date of isolation of each of these principles and we find on consulting authorities that the methods have been so improved that they can be obtained in practically pure condition at present.

X Q. 98. By practically pure condition do you mean pure enough for approximate analysis?

A. The application of approximate analysis to an albuminoid body is never made, because, owing to their peculiar nature, we are never able to obtain them in a crystalline condition. The term practically pure, when applied to an albuminoid body, would have about the same meaning as chemically pure when applied to an inorganic substance.

X Q. 99. By practically pure, do you mean pure enough for the purposes of an ultimate analysis?

A. Combustions when applied to albuminoid bodies are but little avail, owing to an absence of methods for determining molecular weight, also other physical methods which would enable us to build up a structural formula. If we desire to make the combustion of an organic compound with view to determining its structure, it is absolutely necessary that the compound be in crystalline condition, free from the minutest traces of foreign bodies and absolutely anhydrous. Such methods of purification as would be necessary preparatory to combustion of an albuminoid body would result in an alteration or decomposition of the same.

217 X Q. 100. Does your last answer apply to pepsin equally with the constituent elements of pancreatin?

A. It does.

X Q. 101. Does it apply to pancreatin also?

A. It certainly does not. Commercial pancreatin is of variable composition, or represents a mixture of various ferments with other substances, depending upon the process of manufacture. Commercial pancreatin might be defined by the chemist as a mechanical mixture and most distinctly not a chemical compound.

X Q. 102. In answer to X Q. 92, in which you were asked concerning the chemical composition of pepsin, you said that it belonged to the class of unorganized soluble ferments, and in a restricted sense to the class of albumins; but that no chemical analysis of it could be made owing to the impossibility of obtaining it in absolutely pure condition, such as would be necessary for making an ultimate analysis. Will you please explain what you meant by the latter part of your answer to X Q. 92 in the light of your recent answers?

A. By this latter clause, "no chemical analysis of it can be made, owing to the impossibility of obtaining it in absolutely pure condition, such as would be necessary for making an ultimate analysis," I mean that a combustion would be of but little avail in enabling us to establish a definite chemical formula to the compound.

X Q. 103. I must ask you again, Dr. Coblentz, whether you have personal knowledge of the fact that by improved methods the constituent ferments of pancreatin have of late been isolated in an absolutely pure state?

Objected to as generally irrelevant, and already answered.

A. In as practically a pure a condition as we are able to isolate pepsin.

218 X Q. 104. For how long a time have the constituent ferments of pancreatin been isolated to the degree of purity expressed in your last answer?

A. I would not be able to specify the exact time, but a search of the literature would establish that. I might add that I have already cited authorities which have stated the principles to be pure.

X Q. 105. How long is it, according to authorities at your command, since the constituent ferments of pancreatin were first isolated from each other, whether with the degree of purity obtainable at the present time or not?

Question objected to as immaterial and irrelevant, already answered, and is misleading, because assuming that the three ferments named in the question are always present in the so-called pancreatin. This is not the testimony of the witness.

By Mr. DYRENFORTH: I protest against all objections which contain suggestive remarks.

Mr. BROWN: I protest against all questions which contain misleading statements or assumptions.

A. In answer to question 17 I have already stated that trypsin was isolated from the pancreatic gland — 1862, amylopsin from the pancreatic gland in 1869, and steapsin from the pancreatic gland in 1873. That was my understanding when I answered question 17, as also my answer to question 105.

X Q. 106. Who, if you know, has ever applied the name pancreatin to trypsin?

A. I cited several authorities for this in my answer to question 11.

X Q. 107. My present question asks you to designate some person who, in a printed publication or otherwise, has designated trypsin as pancreatin.

A. In the first place, Fehling, in his Handwœrterbuch
219 der Chemie, employs the words trypsin and pancreatin synonymously, thereby indicating that pancreatin was another word for trypsin. Prof. Ladenburg, in his dictionary, states that trypsin was formerly known as pancreatin. In various other works consulted I find that Prof. Heidenhain has named this albumen digesting ferment pancreatin. Of the two dictionaries quoted, the one calls attention to the fact that trypsin was formerly known as pancreatin, while the other dictionary began in about 1870 and is not yet complete.

X Q. 108. What is the date and publication which states that trypsin was formerly known as pancreatin?

A. The publication is Ladenburg's Hand-book of Chemistry, vol. 4, 1887, this dictionary having begun some years previous.

X Q. 109. Do you know of any person who, in a printed publication or otherwise, has designated steapsin as pancreatin?

A. I cite Dunglison as the authority for the statement that steapsin is pancreatin, from the following quotation: "Its great use appears, however, to be to emulsify fatty matters by virtue of its peculiar al-uminoid principle pancreatin which it contains." So

from Dunglison's statement this pancreatin or steapsin was one of the constituents found in pancreatic juice.

X Q. 110. Do not good preparations of commercial pancreatin emulsify fats?

A. I have examined samples which fail to emulsify fats.

X Q. 111. Have you ever seen any commercial pancreatin that would emulsify fats?

A. I have.

X Q. 112. Does not the pancreatic juice contain pancreatin,
220 or cannot pancreatin be obtained from the pancreatic juice?

Question objected to because it is ambiguous and misleading in that ambiguity.

A. As already stated, from the standpoint of a physiological chemist there is no such thing as pancreatin. I have already called attention to the fact that the word is not to be found in any of the authorities on physiological chemistry, also that the term is absent from the American Text-book of Physiology. I have also already called attention to the various meanings of this term when used in a commercial sense, and would therefore ask what is meant by the term pancreatin in the sense it is used in the question?

X Q. 112½. In an early part of the cross-examination I said that unless I otherwise particularize I should, by the term pancreatin, always have reference to commercial pancreatin, as you have designated it. Please understand my last question in the light of this statement.

A. I presume that the commercial pancreatin is prepared from the pancreas. I presume that the pancreatic juice could be employed in the manufacture of commercial pancreatin.

Adj-urned until 5 p. m.

X Q. 113. Have you succeeded, Dr. Coblentz, in getting possession of the other specimens of pancreatin for which you said you would look in the college?

A. My assistant, who has the key for the closet, is absent from the college today, and I will produce said specimens tomorrow morning at the proper time.

X Q. 114. You say that you presume that the pancreatic juice could be employed in the manufacture of commercial pan-
221 creatin. Does this imply that the pancreatic juice contains the constituents of what you designate commercial pancreatin?

A. Commercial pancreatin (so called) presents such a varied mixture of substances that during the course of my examinations of various specimens I came to the conclusion that some kinds were made from anything but the pancreatic gland, these products showing the presence of such substances like corn meal, flour, starch, other inert substances, and failing to show any medicinal effect whatever.

X Q. 115. Do you consider U. S. P. pancreatin commercial pancreatin?

A. The United States Pharmacopœia fixes a standard for quite a

number of commercial products, but this does not alter the fact that they may deviate materially from the standard.

X Q. 116. Has a pharmacist any right to dispense any pancreatin on a prescription except such as answers the U. S. P. requirements?

Question objected to as immaterial and irrelevant.

A. This question of right is a matter for the law to settle. It is comparatively rare that the average pharmacist applies all the U. S. P. tests to the preparations he dispenses.

X Q. 117. Are you able to give the names of the manufacturers who put upon the market the spurious or adulterated pancreatin to which you have referred?

Question objected to because assuming that the pancreatin referred to is spurious, there being no evidence to that effect, and it therefore being an unwarranted assumption.

A. I am acquainted with some manufacturers of pancreatin who place an inferior article upon the market but would under no circumstances compromise them. The samples of adulterated
222 pancreatin alluded to were found among unmarked samples submitted to me for comparative examination.

X Q. 118. What is the reason that you refuse to name, or, as you express it, "compromise" a manufacturer who has been guilty to your positive knowledge of putting an inferior medicinal product upon the market?

Mr. Brown objects to this line of questioning as immaterial and irrelevant and an unwarrantable prying into professional secrets in a proceeding which is not a public inquiry, and in which, therefore, it can do no possible good, and in which it might subject the witness — not only unpleasant but expensive consequence.

A. For professional reasons.

X Q. 119. What are the professional reasons?

Same objection, and the witness is advised that confidences or information which he may bring in his professional capacity relating to particular persons he is not under the law obliged to reveal.

A. Mr. Brown has stated in substance my reasons.

The witness is further advised that if the names of these persons and the information did not come to him in a professional way as a confidence, then he should answer the question, but if it did, then he is not obliged to answer the question.

A. These matters were brought to me and placed as a professional confidence.

X Q. 120. Do you know how many manufacturers have put upon the market inferior preparations of pancreatin which you have examined and found to be below the proper standing?

Question objected to as immaterial and irrelevant.

A. I never took the pains to count, for these matters have cropped out from time to time during a number of years.

223 I waited until witness had answered the question so as not to seem to suggest by any possibility the answer, but I desire to object and protest on record against this line of examination as entirely improper and containing an unwarranted assumption in that the question assumes that there is a proper standard for the commercial substance known as pancreatin and that all preparations that do not conform to that so-called proper standard are inferior, there being no testimony in the record to justify any such assumption.

By Mr. DYRENFORTH: The personal reform which Mr. Brown proclaims at the beginning of his last statement is both gratifying and encouraging.

Mr. BROWN: The suggestion contained in the last statement made by Mr. Dyrenforth is both gratuitous, impertinent and untrue.

X Q. 121. Does not the U. S. Pharmacopœia establish a standard for pancreatin?

A. The U. S. Pharmacopœia establishes a standard evidently intended for the so-called commercial pancreatin based on its peptonizing power.

X Q. 122. How does the U. S. Pharmacopœia define pancreatin?

A. "A mixture of enzymes naturally existing in the pancreas of warm-blooded animals. Usually obtained from the fresh pancreas of the hog."

Mr. Brown objects to the question, because it does not state what edition of the Pharmacopœia is referred to. Mr. Dyrenforth has been continually objecting to all late works, it having no bearing on this question. Now, if his question relates to the U. S. Pharmacopœia prior to 1876, let him make it clear. If it relates to the latest
224 edition, let him make that clear, and the witness is asked to add to his answer the date of the work from which he recited the definition.

Mr. DYRENFORTH: Mr. Brown seems to forget that in due time he will have an opportunity for redirect examination. However, I have no objection whatever to the witness adding whatever he pleases.

A. The edition of Pharmacopœia quoted is the Seventh Decennial Division, date 1893.

X Q. 123. What authority or what person, in a printed publication or otherwise, has said that amylopsin is pancreatin?

A. In Webster's International Dictionary, published in 1892, the following statements are made: "By some the term pancreatin is restricted to the amyloptic ferment of the pancreatic juice."

X Q. 124. Are you able to say to what persons or to what authorities the word "some" refers in the quotation which you have made from Webster's Dictionary of 1892?

A. The authority who contributed this article to Webster's Dictionary cited would certainly not have made this statement without being able to prove the same.

X Q. 125. Have you made any effort to verify this statement in Webster's Dictionary with reference to amylopsin?

A. The statement made in Webster would certainly not have been made unless it could be verified. I also find in Dalton's Physiology, pages 168–169, that the pancreatic juice contains amongst other things three separate ferments, namely, one for a transforming action on starch, called pancreatin. This is the substance of Dalton's statement.

X Q. 126. For how long a time has pancreatin of the same general composition and prepared in the same general way as what
225 you have designated commercial pancreatin been upon the market of the United States and on the shelves of druggists throughout the United States, and known by the name of pancreatin?

Question objected to as immaterial and irrelevant, and as already answered in the opening part of cross-examination.

A. The so-called commercial pancreatin has been on the market quite a number of years.

X Q. 127. Quite a number of years is a very definite expression. Are you able to say whether it has been on the market for as much as thirty years? If you cannot answer from your personal recollection, you may answer from your reading, if you can.

A. I never took the pains to investigate the exact age of this preparation.

X Q. 128. During the whole period that commercial pancreatin, as you call it, has been upon the market of the United States, has any other substance, to your knowledge, been upon the market of the United States under the name of pancreatin?

A. That would be difficult to say, owing to the fact that the commercial pancreatin has always been more or less a mixture of one or more ferments with extraneous matter. To my knowledge, substances of great variability in composition have appeared in the market under this name.

X Q. 129. Did they not fall within the category of what you have designated commercial pancreatin?

A. They might.

X Q. 130. When you ascertained that a manufacturer was putting on the market an inferior or adulterated article of pancreatin did you take any measures for the purpose of causing such manufacturer to alter his practice in that behalf?

Objected to as immaterial and irrelevant and not proper cross-examination.

226 A. Under the circumstances, I do not deem it proper for me to interfere with the business affairs of said firms.

X Q. 132. Is pancreatin the only substance as to which you have known manufacturers to put an inferior or adulterated product upon the market? I am referring, of course, only to medicinal products.

Objected to as immaterial and irrelevant and indefinite.

A. It is frequently the case that we find other medicinal products upon the market which do not come up to the Pharmacopœia standard.

X Q. 74. Has it ever been brought to your knowledge in any way that inferior or adulterated pepsin has been put on the market by manufacturers?

A. Occasionally we find specimens of pepsin of inferior digestive properties upon the market.

X Q. 134. What name did that inferior pepsin go by?

A. Labelled pepsin; some saccharated pepsin.

X Q. 135. Was it pepsin, although it was an inferior quality?

A. The substance contained pepsin.

X Q. 136. You have stated, I believe, that trypsin is insoluble in glycerine; is that correct?

A. I stated so on the authority of Beilstein, which refers to pure trypsin.

X Q. 137. Is not trypsin readily soluble in water?

A. I understand it is.

X Q. 138. Suppose, if you had a water solution of trypsin and were to add glycerine, would the trypsin precipitate?

A. I never made the experiment.

X Q. 139. Have you no opinion on the subject?

A. Not having made experiments in that direction I would not be able to speak authoritatively.

227 X Q. 140. Do I understand from this that you have no opinion on the subject?

A. I refer to my last answer.

X Q. 141. Suppose you were to take a water solution of trypsin and were to add to the solution a large percentage of glycerine; would the resulting product be a glycerole?

A. In the strict sense of the word it would not be glyceride. I would call it a hydroglyceride, for glycerides are defined as solutions of medical substances in glycerine.

X Q. 142. Is it necessary in order to produce a glyceride that anhydrous glycerine be employed?

A. Not necessarily, but the resulting products should be free from water as far as possible to remove it without injury to the preparation.

X Q. 143. Suppose you were to dissolve trypsin in a mixture of glycerine and the smallest practical amount of water consistent with the dissolving of the trypsin; would you call that product a glycerole of trypsin?

A. As a point of information before answering this question, I would like to ask how much water would be employed for the solution of the trypsin from which you expect to make a glycerole?

X Q. 144. I thought I made that clear in my question when I said that the glycerine was to be mixed with just enough water to dissolve the trypsin.

A. It depends entirely on the proportion of water employed as to

whether the resulting product will be a glyceride in the true sense of the term or hydroglyceride.

Adjourn until April 6th, 10 a. m.

228 APRIL 6TH—10 a. m.

Met pursuant to adjournment.
Parties present as before.

Witness continues and adds to his answer 125 the exact quotation from Dalton's Physiology, as follows:

"The most important of these is 'pancreatine,' or the sugar-producing ferment. * * * Pancreatin and trypsin are accordingly two distinct substances with different properties, the former having an action on starch, the latter upon albuminous matters." This is taken from pages 86 and 87, seventh edition, 1882.

X Q. 145. Suppose that one part trypsin were dissolved in two parts water and to the solution ninety-seven parts of glycerine ninety-eight per cent. pure were added, would you call the resulting product a glycerole?

A. If this be the case, then basing my answer upon the most eminent authority of Prof. Beilstein, the resulting product would not be a glycerole, for owing to the insolubility of trypsin in glycerine precipitation would necessarily ensue.

X Q. 146. Suppose that one part of trypsin were dissolved in twenty-five parts of water and to that solution seventy-four parts of glycerine were added, would the resulting product be a glycerole?

A. Glyceroles are, according to the definition cited on page 782 of the National Dispensatory: "This class of preparations consists mostly of solutions of one part of a chemical compound in four or five parts by weight of undiluted glycerin." If this authority be correct the above mixture could not be called in the strict sense of the term a glycerole.

X Q. 147. Suppose one part of trypsin to be dissolved in nineteen parts of water and suppose eighty parts of undiluted glycerine
229 to be added to the solution, would the resulting product be a glycerole according to the definition which you have just quoted from the National Dispensatory?

A. In the strict sense of the term a glycerole is, as above quoted, solution of a medicinal substance in glycerine; in some cases it is first necessary as a preparatory step to bring about a solution of a substance in water, but it was never intended that more water should be employed than absolutely necessary in order to avoid undue dilution of the resulting glycerole. In the above hypothetical question an unnecessary excessive quantity of water has been given, hence could not with justice be included among the glyceroles because of undue dilution.

X Q. 148. In the formula assumed by my last question how many parts water would have to be substituted for the proportion there given in order to constitute the resulting product a glycerole?

A. Not having made any experiments with regard to ascertaining

the exact solubility of trypsin, I would not be able to state exactly how many parts of water should be used.

X Q. 149. If you have made no experiments, as you say, to ascertain the exact solubility of trypsin in water, as you say, on what do you base your statement that nineteen parts of water would be too much?

A. I base my statement upon the authority of Prof. Beilstein that trypsin is very soluble in water. Upon this statement I would assume that nineteen parts of water would be more than necessary for solution.

X Q. 150. As a practical chemist, I suppose you could by experiment ascertain the proper proportion of water to be used and thus produce a glycerole of trypsin, could you not?

230 A. If Prof. Bielstein's statement regarding the insolubility of trypsin in glycerine is correct, I would assume from this a true glycerole could not be prepared.

X Q. 151. You have read from the National Dispensatory a definition of a glycerole; do you accept that definition as accurate?

A. As an answer to the above, I will cite a definition of the term glycerole as given in my own Hand-book of Pharmacy: "Glycerites are solutions of medicinal agents in glycerine. Glycerine, because of its valuable solvent properties and freedom from rancidity, forms an excellent vehicle for the external application of many organic substances. It is adapted as a menstruum in many instances where water or alcohol could not be used." I would also add quotation from Practice of Pharmacy, by Prof. Remington, as follows: "Glycerites are mixtures of medicinal substances with glycerine. Glycerine is a valuable solvent; and one of the principal advantages of the glycerites is that they afford a rapid and simple method of making aqueous solutions of substances which are not otherwise easily soluble." I would add to the above, it is the prime object in preparing a glycerole to employ the peculiar solvent glycerine as a menstruum. And unnecessary dilution by means of water is unwarranted.

X Q. 152. Does Beilstein state that trypsin is insoluble in a mixture of glycerine and water, or is precipitated by the addition of glycerine from an aqueous solution?

A. Beilstein's statement as regards the solubility of trypsin is restricted to the solubility of pure trypsin in water alone and glycerine alone. I have made no experiments myself as regards the solubility of trypsin in mixtures of water and glycerine.

X Q. 153. On what, then, do you base your answer to X Q. 145 in which you say that owing to the insolubility of trypsin in

231 glycerine precipitation would necessarily ensue? You will observe that the conditions of the question were that one part of trypsin was dissolved in two parts of water, and that to the solution was added ninety-seven parts of glycerine ninety-eight per cent. pure.

A. In answering question 145 I stated that my answer was based upon the authority of Beilstein, assuming that pure trypsin being insoluble in glycerine, it would necessarily be precipitated when

added in concentrated aqueous solution. The amount of water present being very minute in proportion to the amount of glycerine present. If excessive quantities of water were employed for dissolving the trypsin before admixing with the glycerine, the question assumes a different phase.

X Q. 154. Have you ever prepared an emulsion of any fixed oil with pancreatin?

A. I have emulsified fixed oils by means of commercial pancreatin.

X Q. 155. Have you ever emulsified fixed oils with any pancreatin other than commercial pancreatin?

Question objected to as containing an unwarranted assumption.

A. The powder used was obtained from container labelled pancreatin.

X Q. 156. Do you recollect the name of the manufacturer of the particular pancreatin which you employed in the emulsion referred to?

A. I have made the attempt to emulsify fixed oils in this way a number of times, but cannot specify exactly what specimens I used from time to time.

X Q. 157. When was it that you made such attempts, and how did they succeed?

A. I have made these experiments at intervals through a
232 period of about seventeen years, as near as I can recollect. I have found some specimens possessed emulsifying properties; in others it was totally absent. Among some of these specimens labelled pancreatin it was distinctly stated upon the label that this was used for or possessed the property of emulsifying fats. Upon further examination of some of these specimens above cited, I found that trypsin, the albumen digesting ferment, was absent, also steapsin, the starch digesting ferment, was absent.

X Q. 158. What did the proper or satisfactory specimens that you examined contain?

Question objected to as containing an unwarranted assumption.

A. In order to define what, in my estimation, constitutes a "proper or satisfactory specimen," it will be first necessary for me to state that we find on the market, under the title "pancreatin," powders which differ among themselves as regards the number of fermentive principles present, and the specific medicinal use for which they are intended. For example, one sample labelled "pancreatin" states upon the label that it "digests the oily and fatty portions of food," indicating that the preparation consists of steapsin, no claim being made for the presence of any other digestive principles; an examination confirmed the accuracy of the above. Again, other samples labelled "pancreatin" I found to consist of a mixture of amylopsin (the starch digestive ferment) and steapsin (the fat emulsifying ferment), trypsin, the albumen digesting principle being absent. The presence of trypsin being unnecessary when this is administered in combination with pepsin, because the latter digests albumen like the

former. As I have already cited, various authorities apply the title pancreatin indiscriminately to any one of the three ferments, trypsin, steapsin or amylopsin, or other products of digestive value
233 obtained from the pancreas; hence any one of the above-named substances can, with propriety, be labeled pancreatin. These various specimens above cited are considered by me as proper specimens.

Adjourned until 4 p. m.

X Q. 159. I see that you produced here this morning, as you said you would, several additional samples of pancreatin. Please state how the several samples are designated, and of whose manufacture they are?

A. Extractum pancreatis (Fairchild), Fairchild Bros. & Foster; pancreatine, Reed, Carnick & Andrus; pankreatin, manufactured by Lehn & Fink; pancreatin, prepared by Savory & Moore; Cudahy's pancreatin, manufactured by the Cudahy Packing Company.

X Q. 160. I observe that the bottle containing the specimen labelled Cudahy pancreatin is labelled sixteen-ounce bottle, and that about three-fourths of the contents are absent. Has any part of the contents been used in the College of Pharmacy, as far as you know?

A. It has.

X Q. 161. For what purpose, if you know, has the greater portion of the contents of that bottle been used?

A. For experimental purposes.

X Q. 162. I observe that the Fairchild Bros. & Foster specimen which you have produced is a one-ounce bottle, and that about one-third of the contents is absent; are you able to say whether the missing portion of the contents of that bottle has been used in the College of Pharmacy, and for what purpose?

A. It has been used by myself for experimental purposes.

X Q. 163. I observe that some portion of the Lehn & Fink
234 specimen is missing; are you able to say whether the missing portion has been used in the College of Pharmacy, and for what purpose?

A. Experimental and medicinal purposes.

X Q. 164. I observe that the specimens to which I have thus far referred are of a light-yellow color, though not of a uniform shade, and I observe that the Reed, Carnrick & Andrus specimen is of a very dark-brown color; I also observe that perhaps a teaspoonful of the contents of the ounce vial has been removed. Do you know whether the portion referred to was removed in the College of Pharmacy, and for what purpose? If so, please state.

A. Removed by myself for purpose of examination.

X Q. 165. When was this done, what was the nature of the examination, and what were the results?

A. This examination I made some years ago, and, in order to give you results, it will be necessary for me to look up my records. The examination was made by myself, because the color of the sample attracted my attention.

X Q. 166. Without going into details in the matter of results, are you able to say generally from your recollection whether you found the dark specimen last referred to a good specimen of pancreatin or not?

A. I would prefer to look up the records first.

X Q. 167. I see by the label on the specimen of Cudahy's pancreatin, out of which about twelve ounces appear to have been used, that it is claimed that this digestive ferment will effectually transform starch into sugar, convert albuminoids into peptone or tryptone, emulsionize fats and curdle milk. Are you able to say whether or not the product will fulfill the claims made for it by the manufacturers?

Objected to as immaterial and irrelevant.

235 A. I never examined the above specimen any further than regards its amyloptic power, using it in lectures to show its power of transforming starch into sugar.

X Q. 168. What have you to say concerning it in the matter of its amyloptic power?

A. It seemed to be a very fair specimen in this respect.

X Q. 169. Please state what the Cudahy's specimen is, whether it is pancreatin or not.

A. The sample is labelled pancreatin. As regards its contents, I find it necessary to refer you to the Cudahy Packing Company, for I am not aware of the process they employ for its preparation.

X Q. 170. Did you personally use any portion of the Fairchild Bros. & Foster specimen, which you have produced?

A. I have personally used all of the missing portion.

X Q. 171. When did you thus use it and for what purpose?

A. For demonstrating the amyloptic power of preparations of pancreatin.

X Q. 172. Are you able to say from recollection whether you found the amyloptic powers of this Fairchild Bros. & Foster specimen good or otherwise?

A. I always place the greatest reliance upon this preparation, particularly in making experiments before the class.

X Q. 173. I notice that the label of this Fairchild Bros. & Foster specimen claims that the article represents all the digestive ferments of the pancreas and exhibits in a high degree of activity all its important functions, namely, that it transforms starch into sugar and dextrin, converts proteids into peptones in alkaline and neutral media, emulsifies fats, and curdles the casein of milk; are you able to say whether or not the product in that sample will fulfill the claims thus made for it?

236 Mr. Brown objects to the above question as misleading because it does not give other important statements of the label, and without such other statements the meaning of the part referred to cannot be made clear. He thinks the whole label should be quoted or none, even including the name, which is not pancreatin.

A. I have found that the said sample of "extractum pancreatis" (Fairchild) possesses the power of transforming starch into sugar and dextrin; also of converting proteids into peptone, of emulsifying fats and curdling the casein of milk.

X Q. 174. Did you personally use the missing portion of the Lehn & Fink specimen, which also bears the name of E. Merck, Darmstadt? If so, when did you use it, for what purpose and with what result, so far as you can recall?

A. I have used portions of said sample from time to time in lectures to demonstrate its amyloptic power. Further examination of this specimen here exhibited was not made. To demonstrate in lecture the various actions of other ferments that might be present in commercial pancreatin aside from that of the amylopsin were found impracticable. For that reason I have used various specimens for showing the action of digestive ferments or starch alone.

X Q. 175. Is the Fairchild Bros. & Foster specimen which you have produced and which is labelled "extractum pancreatis" a specimen of what you have designated commercial pancreatin, as you have designated it; or, in other words, does it come within the compass of manufactured products referred to by you as commercial pancreatin?

A. Messrs. Fairchild Bros. & Foster, I observe, refrain from employing the title "pancreatin" designating their prepara-
237 tion as an "extractum pancreatis." Their reasons for this are made evident by the label upon the bottle, which reads as follows:

"This article is absolutely free from starch, milk sugar, or any factitious substance. Most of the so-called pancreatins in the market—composed largely of sugar of milk—are practically useless as they possess only in the feeblest degree any property of the pancreatic juice. Some of them exert no action upon starch or proteids. Our pancreatic extract represents all the digestive ferments of the pancreas and exhibits in a high degree of activity all its important functions, namely: It transforms starch into sugar and dextrin, converts proteids into peptone in alkaline and neutral media; emulsifies fats; curdles the casein of milk."

In answer to Q. 158 I gave my opinion of what constitutes commercial pancreatin and call attention to the fact that this preparation is not so labelled.

X Q. 176. I am not asking you as to the label on this particular specimen, but I am asking you whether or not it falls within the category of products which you have designated commercial pancreatin? Please answer that question.

A. I have on several occasions in the testimony explained what I designate as commercial pancreatin.

X Q. 177. Do you refuse to answer my question?

Question objected to as containing an unwarranted assumption.

A. I have already defined what is understood by the term commercial pancreatin. This preparation of Fairchild Bros. is designated as a special extract and necessarily constitutes one of a sepa-

rate class of preparations. This assumption is based upon the use of the title "extractum pancreatis."

238 X Q. 178. When you were asked to produce all the specimens of commercial pancreatin which you had here in the College of Pharmacy, and ostensibly complied with that request, why did you include this Fairchild Bros. & Foster specimen labeled "extractum pancreatis," which you now do not definitely say is a specimen of commercial pancreatin, as you call it?

A. Owing to the fact that this preparation is frequently designated and dispensed commercially by many in a general way as "pancreatin" and placing this general interpretation on the subject, I produced it along with others, including a sample of trypsin.

X Q. 179. It is true that you produced a sample of trypsin among the other specimens which you brought, but it is also true, is it not, that in answer to X Q. 159 in which I said that I saw that you had produced this morning, as you said you would, several additional samples of pancreatin and requested you to state how the several samples were designated and of whose manufacture they were, you named among others the Fairchild specimen and did not name trypsin specimen?

A. The sample trypsin was produced along with the others with a view of supplying information if occasion demanded.

X Q. 180. Is that all the answer you wish to make to my question?

A. I have already stated my reason for producing the sample of Fairchild's preparation.

X Q. 181. Please translate into English the Latin designation on the Fairchild's specimen extractum pancreatis.

A. Extract of the pancreas.

X Q. 182. Is not every specimen of pancreatin an extractum pancreatis?

A. A commercial pancreatin we would infer as being ex-
239 tractum pancreatis, but as examination of the various commercial samples have shown, they vary widely as regards composition and properties, as already referred to answer to Q. 158.

X Q. 183. Do you not understand the text upon the label of the Fairchild Bros. & Foster specimen to classify this specimen as pancreatin, but to claim for it exceptional merit, for reasons which are stated?

A. I understand from the label of Fairchild Bros.' specimen that they endeavor to distinguish this preparation from the so-called commercial pancreatins, hence a distinctive title, "extractum pancreatis."

Mr. BROWN: The question just asked was not a proper one, because it called for an expression of opinion on the construction of language, in which this witness has not appeared as an expert, he being called as a chemical and pharmaceutical expert, but it was permitted to be answered because it was of no consequence.

X Q. 184. Have you ever personally manufactured extracts of the pancreas of the nature of what you call commercial pancreatin?

Objected to as immaterial and irrelevant.

A. I have prepared various preparations, liquid and solid, from the pancreatic gland, with a view of studying their properties. I never attempted to go into the manufacture of the so-called commercial pancreatin.

X Q. 185. What did you call the various extracts from the pancreatic gland which you made? That is, did you call them, or any of them, pancreatin?

A. I did not name any of them, because it was simply a matter of scientific experiment; I did not think it necessary to apply names to these various preparations which I prepared during my various experiments.

240 X Q. 186. What do you understand by the name pancreatin?

Question objected to as having been answered time and again in the course of this examination, both in the direct examination, in answer 11 and particularly the last part of the same, and also in the cross-examination more than once.

A. I have explained what I understand of the name pancreatin, I think, in very clear terms several times during the direct and cross-examination.

X Q. 187. In other words, when you use the word pancreatin, if you ever do use it, what do you mean by it?

A. As I have already cited several times, the word pancreatin is unknown to physiological chemists, hence speaking from a standpoint of a chemist, I do not recognize the word. Speaking from a commercial point, I have already explained the various meanings applied to this word.

Adjourned until April 7th, 3 p. m.

APRIL 7TH, 3 p. m.

Met pursuant to adjournment.

Parties present as before.

X Q. 188. You have just stated off the record that you have found an additional specimen in the college labelled pancreatin, and have brought it to the examination-room. Please state whose preparation it purports to be.

A. Armour & Company's pancreatin.

X Q. 189. Is the name pancreatin recognized in pharmaceutical chemistry?

A. In some text-books upon pharmaceutical chemistry we find the title pancreatin. For example, one of these which I cited in the direct examination states that it is a synonym for trypsin. In other text-books the title does not appear.

241 X Q. 190. I have read over your deposition given thus far, and I think I have read it understandingly, but I am unable to determine from your answers whether the name pancreatin is one which you recognize or use professionally, or, if you do use it, in what sense you use it. Can you clear this up?

Mr. BROWN: This question has been repeated in other forms a

half dozen times, and the answers have been perfectly uniform, commencing with answer 11 in direct examination, if I remember the number correctly, and I think I do, and therefore the repetition is simply a waste of time, and an effort to produce uncertainty by the questions rather than the answers, and therefore improper. Still the witness is requested to continue in the patience he has before exhibited and answer the question again.

A. As already explained several times in my deposition and cross-examination, I desire once more to state that the word "pancreatin" or "commercial pancreatin," which I also employed, is absolutely unknown to and unrecognized by scientific chemists. I called attention to the fact that the word pancreatin never occurs in either standard works on physiological chemistry or in its literature. The word is used commercially indiscriminately for preparations containing either trypsin, steapsin or amylopsin, or a mixture containing two, or sometimes for a mixture containing the three. A manufacturer has a perfect right to label a preparation containing any one or two or all three of these ferments pancreatin. For I have shown that the word has been applied indiscriminately to a number of mixtures.

My experience in the examination of the so-called commercial pancreatins from time to time through a number of years bears out the above views, as well as a search of the literature and conversations which I have had with manufacturers of this product.

242 X Q. 191. Is not every specimen of pancreatin, if unadulterated, a preparation made from the pancreatic gland?

A. It is to be hoped that the various manufacturers prepare their so-called pancreatins from the pancreatic gland. Since they do not publish their method of preparations we must necessarily accept their statements. Once before in this cross-examination I called attention to the fact that I have found specimens which I stated that it seemed to me as though they were prepared from anything else except the pancreatic gland. Of course such cases occur very rarely.

X Q. 192. In the course of your cross-examination you produced and referred to a publication of which you are the author. I would like to have you produce that book again if you please.

A. I herewith produce a copy of the book.

X Q. 193. Is the book which you have just produced in all respects identical with the one produced yesterday?

A. It is, with the exception that some new chapters on urine analysis and microscopy, etc., were added in the later edition.

X Q. 194. Do you find the word pancreatin used in this hand-book of pharmacy of which you are the author?

A. In the index I find the reference "pancreatin emulsion." This refers to the uses of pancreatin, to which it is sometimes applied in preparing emulsions.

X Q. 195. The index refers to page 300 of the volume, and on that page I find a paragraph which I quote as follows:

"*Pancreatin.*—A mixture of natural ferments; forms an excellent emulsifying agent when employed in an alkaline medium (as

sodium bicarbonate). The emulsions obtained by means of it
243 are rarely permanent, but are often preferred, because of their easy assimilation, for the administration of such fats as cod-liver oil to consumptives. Pancreatin is often added to emulsions to assist the thorough emulsifications of the fats or oils. It should be mixed with an equal bulk of sodium bicarbonate and dissolved in a small quantity of water; to this is then added the oil or emulsion gradually, the mixture being well shaken after each addition."

Please state whether the foregoing is a correct transcript from page 300 of your work "Hand-book of Pharmacy," published in the year 1894?

A. It is.

X Q. 196. To what did you refer by the name "pancreatin" in the foregoing quotation?

Question objected to as immaterial, irrelevant, and because, as stated by the witness in preceding answer, "pancreatin emulsion" was being described.

A. As the index shows, as well as chapter under which it is included, it is referred to simply as one of many emulsifying agents.

X Q. 197. What substance did you refer to when you used the name pancreatin in the paragraph above quoted?

Same objections.

A. The paragraphs already cited explain themselves. It was not the purpose of this book in detailing methods for preparing emulsions to explain all points concerning the composition of so-called pancreatin, so that a short general statement was made in saying that it was merely a mixture of natural ferments, not specifying what might be present or absent.

X Q. 198. "Pancreatin" as used in the above quotation is a noun, and hence the name of some object. Will you not state the object that you intended to name by the term "pancreatin" in that paragraph?

244 A. It referred to pancreatin in a general commercial way.

X Q. 199. Then I understand that it meant what you now call "commercial pancreatin." Is that correct?

A. As used in this connection, as employed in my text-book, I call attention to its uses as an emulsifying agent, it not being the purpose of the book to go into details concerning all the possibilities of the question commercial pancreatin. Understand distinctly that I call attention to its use in this book simply as an emulsifying agent and nothing else.

X Q. 200. You seem to have misunderstood my question, Mr. Coblentz, and I will therefore try to make it clear. By the term "pancreatin" in the above quotation, did you refer to the substance which you now designate commercial pancreatin, as to which you have said in a former portion of your deposition you have frequently made tests for determining their emulsifying powers?

A. In the above article I simply called attention to the general use among pharmacists of what they buy under the name pancreatin

as an emulsifying agent. In my lectures, in which I go into greater details, I always call attention of the students to the fact that this agent occasionally fails to emulsify and frequently specify that they should use some particular brand, requesting them when selecting a specimen to read the label and ascertain if it states thereon that the product is capable of emulsifying fats and oils.

X Q. 201. In the work entitled "An American Text-book of Physiology," edited by Wm. H. Howell, Ph. D., M. D., professor of physiology in the John-Hopkins University, Baltimore, Md., published in the year 1896, I find on page 240 the following sentence:

"Trypsin has never been isolated in a condition sufficiently
245 pure for analysis, so that its chemical composition is unknown."

Please state whether you find the statement to be as I have quoted it.

Objected to as immaterial and irrelevant, and attention is called to the fact that Mr. Dyrenforth uses books edited and published long after 1876, constantly, when he desires to sustain a point, although he objects to their use by our side for the same purpose.

A. It is.

X Q. 202. Do you agree with that statement?

Same objections.

A. Before answering this question, I must state that the examiner's knowledge concerning points in organic chemistry is such that it would be necessary for me to explain to him what the quotation means. In the first place I desire to call attention to the fact that this is a text-book on "physiology," and not on organic chemistry. I have already referred to the fact that the celebrated authority, Prof. Beilstein, gives a method for the preparation of what is known to organic chemists, pure trypsin. About two years ago, while in Europe, I prepared a specimen of this pure trypsin after his methods, and found that it did not show any traces of the presence of either steapsin or amylopsin. This is what I consider pure trypsin. The American Text-book of Physiology calls attention to the fact that no definite chemical formula can be ascribed to this body, owing to the peculiar nature of albuminoid bodies, it being impossible at present for organic chemists to solve the various problems concerning the structure or inner arrangement of the atoms which go to make up the molecules of this exceedingly complex class of compounds.

X Q. 203. I do not want you to waste any time in explaining matters of chemistry to me. Your function is not to undertake to explain to me, but to the court. Have you made any special
246 study of the subject of philology, particularly so far as the formation of English words from Latin and Greek words is concerned?

A. In the above answer I was simply endeavoring to explain the meaning of the quotation cited from the American Text-book of Physiology. As regards the latter question I wish to state that I do not make any pretensions of being a philologist.

X Q. 204. Then are you able to say whether or not the prefix

pancreo upon proper principles of word-building could rationally ensue from the noun pancratium?

Question objected to as immaterial and irrelevant and incompetent, in view of the word "then" in the question.

A. I wish to say that rules of chemical nomenclature or philology are rarely if ever employed in building up fanciful trade titles. Each and every manufacturer of commercial products has a right to coin a euphonic title which might best suit his purposes. I would cite, for example, that the following fanciful titles might all be equally used for what is known as a boro tartrate of aluminum, namely, boral, boroal, boal, boalum. Of these titles a manufacturer would naturally select that one which could most easily be retained by the memory. I know of instances where a manufacturer has paid a handsome premium for the fortunate designer of a fanciful title. I therefore see no grounds for preventing a manufacturer from using the prefix "pancreo," if he so desired, to indicate the presence of pancratium in a preparation.

X Q. 205. Suppose a manufacturer were to put upon the market a digestive compound, to which he gave the name pepso-pancreatin, would it be reasonable to infer that it contained as the sole or leading ingredients the well-known digestive substance pepsin, and the other well-known digestive substance pancreatin, understand-
247 ing the latter word in the sense in which it is used in your own publication, from which quotation has been made? In answering this question please assume that the manufacturers of the component parts and also of the compound are honest.

Question objected to as incompetent and irrelevant, because it is suppositious and not cross-examination, because the witness was not examined in direct in regard to this coined word and has not professed to have examined into the subject inquired about in this question.

A. If the term pancreatin is employed here in a sense for which I intended to use it in my work, then I might assume that the above pepso-pancreatin contain pepsin and steapsin.

X Q. 206. If you were to see a digestive compound labeled pepso-pancreatin, you would not then infer that it contained as the sole or leading ingredients the well-known digestive pepsin and the other well-known digestive agent pancreatin, such as is in extensive use throughout the United States and to be found in all or nearly all drug stores?

Same objections, and also as just answered.

A. Since there are no rules which govern the compounding of fanciful titles, I would assume that the title pepso-pancreatin was simply suggestive, indicating to me that it was intended to be used as a digestive ferment. If I were asked my opinion as to what the contents might be, I would say that I might rationally assume the presence of the well-known ferment known as pepsin. As to the meaning of the term pancreatin, I have already expressed my opin-

ion a number of times. A manufacturer might employ the full title pancreatin, placing in this preparation pepsin and amylopsin, or pepsin and steapsin, or a mixture of all three, omitting
248 trypsin on the ground that it performs the same office of digesting albumin, like pepsin, and yet state that his preparation contains pancreatin.

X Q. 207. Then, according to your interpretation, the designation pepso-pancreatin would have to signify, if it were honest, the presence of pepsin and a product derived from the pancreatic gland. Is that correct?

Same objections.

A. Placing a strict interpretation upon the above title I might infer that the preparation contains pepsin and most any one of the several products obtainable from the pancreas. Although I have already stated there is no rule governing the coinage of such fanciful trade titles.

Redirect examination:

R. D. Q. 208. You were asked in effect if you were an expert philologist and you answered negatively. Did you mean by that negative answer to include chemical and pharmaceutical philology or not?

Objected to as having coined an expression so original and fanciful that it ought to be the subject of a trade-mark.

A. I understood the question to refer to the subject of abstract philology as a separate branch of study as taught in universities. I claim to have studied etymology applied to chemistry and pharmacy.

R. D. Q. 209. In direct examination you stated that pancreo-pepsine was a fanciful or trade name and not a name descriptive of the principal ingredients, and that the prefix pancreo was as properly derived from pancratium as from pancreatin. Are there any rules of chemical or pharmaceutical nomenclature or other reasons called to your attention in cross-examination which induce you to change the opinion before expressed to which I have just referred?
249 A. I wish to reaffirm my opinion already expressed during the direct examination. The cross-examination has not changed my opinion or convictions.

R. D. Q. 210. Have you examined the United States Pharmacopœias and the United States Dispensatories prior to the last edition of these works for the term or name pancreatin, and, if so, with what result?

A. I have searched the Pharmacopœias as far back as 1860 and notice that the term pancreatin is employed for the first time in the Pharmacopœia of 1890. I find the title pancreatin present in previous editions of the United States Dispensatory, that is, as far back as 1872. I desire to add that in the United States Dispensatory of 1872 I found the title pancreatin in the index, which referred me to an article entitled pancreatic emulsion.

R. D. Q. 211. In your own work entitled "Hand-book of Pharmacy" under the article relating to pancreatic emulsions you mention pancreatin and speak of its purpose as an emulsifying agent. Do you anywhere in that article state that the so-called pancreatin is a mixture of all the natural ferments, or how many is necessary for the purpose intended concerning which you are writing?

Objected to as incompetent, first, because it is leading; secondly, because the article has been spread upon the record and speaks for itself; and, thirdly, because the witness has fully stated in the cross-examination what he intended to signify by the word pancreatin as there employed.

A. In this article in my hand-book entitled emulsions, it was simply my desire to call attention to the fact that pancreatin might be used as an emulsifying agent, thereby calling attention indirectly to the presence of an emulsifying agent sometimes found in this substance called pancreatin. In explaining the uses of this
250 so-called pancreatin, I made the incidental note that it was "a mixture of natural ferments," not specifying number. I wish also to state that when used for this purpose it is only necessary that steapsin or the emulsifying agent be present.

R. D. Q. 212. Does the article referred to point out with what it is desirable to employ the natural ferment (which you say is steapsin) so as to make the proper emulsifying product or not?

Objected to as incompetent, since the article speaks for itself, and further is leading.

A. I do not quite understand the question.

R. D. Q. 213. You have just stated that the natural ferment to which you refer in this article is steapsin. Please state whether or not that is recognized by the authorities as the emulsifying ferment of the pancreas.

Same objection.

A. It is, although in said article I did not employ the term steapsin. It was so understood by us to be such because the text was used along in conjunction with lectures upon this subject.

R. D. Q. 214. You have stated that steapsin is the one of the ferments and that it is by some recognized authorities called pancreatin, and you have also stated that amylopsin is another ferment contained in the pancreas, the office of which is to convert starch into sugar; you have also stated that trypsin is a third ferment obtained from the pancreas, the office of which is to act on albuminoids, and that each of these two last-mentioned ferments are singly designated by some eminent authorities as pancreatin, and that all three of these combined are by other authorities designated as pancreatin. If you wish to emulsify fats and perform no other function would you seek a so-called pancreatin which combined all of the three ferments or only one?

251 Objected to as leading and as immaterial and irrelevant.

A. If I desire to emulsify fats I would select a pancreatin which consists exclusively of steapsin, considering it unnecessary that any of the other ferments be present.

R. D. Q. 215. During cross-examination you were asked once or twice in regard to the possibility of isolating steapsin so perfectly as to enable you to make an ultimate analysis; now, independent of this possibility, please state whether or not it is feasible to isolate steapsin so as to make it in practical effect the only active agent in the treatment of a particular food.

Same objection.

A. It certainly is.

R. D. Q. 216. Please state whether or not it is feasible to isolate amylopsin sufficiently *from the other ferments* of the pancreas to make it practically the only active ferment in the treatment of food.

Same objection.

A. It is. We have such preparations on the market.

R. D. Q. 217. Please state whether it is feasible to isolate trypsin to such an extent as to make it practically the only active agent in a preparation for the treatment of a food.

Same objection.

A. It is. We have such a preparation on the market also.

R. D. Q. 218. You have testified that these three ferments can be isolated from each other to a practically pure state and have cited your authority; you have also now testified aside from this pure condition they can be isolated to a sufficient purity to enable them to in effect act separately on substances to be treated and that at least two of these, trypsin and amylopsin, are in the market
252 in that separate condition. Can you state the name of one manufacturer who puts upon the market trypsin and amylopsin isolated in the separate condition?

Objected to as immaterial and irrelevant.

A. Messrs. Fairchild Bros. & Foster, of New York city.

R. D. Q. 219. Have you possessed vials of these separate preparations—that is, trypsin and amylopsin—made by Fairchild Bros. & Foster?

A. I have in my possession a sample bottle of trypsin of the manufacture of Fairchild Bros. & Foster and have had previously specimens of trypsin and amylopsin of foreign manufacture.

The sample of trypsin to which the witness refers is now offered in evidence and marked "Complainant's Exhibit Fairchild's Trypsin, Otherwise Called Pancreatin."

The exhibit offered is objected to as incompetent, immaterial and irrelevant, and the title dictated by counsel for complainant is objected to to the extent of the words "otherwise called pancreatin" as unwarranted by anything which appears upon the exhibit itself.

Mr. BROWN: The name upon the exhibit is trypsin, which is a

synonym of pancreatin as employed by some eminent authorities shown on record.

R. D. Q. 220. Why was more of the powder used from the Cudahy bottle called pancreatin which you produced than from the other bottles?

A. It being a large gratis sample, I frequently gave portions of it to various parties about the building who had occasion to use it, also frequently passed specimens of this powder among the students for examination.

253 R. D. Q. 221. Please state whether there is practically any difference between the colors of the trypsin sample produced, otherwise called pancreatin, and the Cudahy sample called pancreatin and the Fairchild Bros. & Foster sample called extractum pancreatis.

Objected to as leading and as immaterial and irrelevant.

A. There is practically no difference in color.

R. D. Q. 222. How about the color of the Armour sample?

Same objection.

A. It is practically the same.

R. D. Q. 223. Compare the colors of the sample just referred to with the color of the sample in the Savory & Moore vial.

Same objection.

A. The sample of Savory & Moore has a light reddish brown color.

R. D. Q. 224. State the color of the Reed, Carnrick & Andrus sample.

Objected to as immaterial and irrelevant.

A. A very dark brown.

The vial containing the sample labeled extractum pancreatis, which was produced during cross-examination and referred to, is now introduced in evidence and marked "Complainant's Exhibit Fairchild's Extract Sample, Otherwise Called Pancreatis."

R. D. Q. 225. Have you tested contents of the vial manufactured by Savory & Moore or samples just like it or not?

A. Some years ago I examined an original package of this same kind as exhibited.

R. D. Q. 226. What test did you make with it?

A. As regards its emulsifying properties, starch digestive
254 properties, also as regards its albumin digesting properties. I found the last-named albumin digestive properties absent.

The sample referred to is offered in evidence and marked "Complainant's Exhibit Savory & Moore Pancreatin."

R. D. Q. 227. Have you looked up results of your test of the sample made by Reed, Carnrick & Andrus, and, if so, state results.

A. I have, finding that it possessed emulsifying properties only.

The sample last referred to is offered in evidence and marked "Complainant's Exhibit Reed's Pancreatin."

The sample of Armour's referred to in cross-examination is offered in evidence and marked "Complainant's Exhibit Armour's Pancreatin."

R. D. Q. 228. In making a compound which is called pancreo-pepsine and in which we will assume pepsin is one ingredient, what would be the function of the pepsin, that is, what kind of substances would it digest?

A. Pepsin digests albuminoid matter only. That is, converts albumins into peptones.

R. D. Q. 229. In case a substance obtained from the pancreas was used in combination with the pepsin, is there any ferment which might be obtained from the pancreas which should be omitted from this substance placed in combination with pepsin or which would not be necessary?

Objected to as immaterial.

A. Trypsin could be omitted, its presence being unnecessary, owing to the fact that pepsin performs the same functions, that is, digesting albuminoid matter.

255 Recross-examination *de bene esse:*

R. X Q. 230. For how long a time, to your knowledge, have the products of Fairchild Bros. & Foster labeled trypsin and amylopsin been upon the market of the United States?

A. I cannot recall the exact time.

R. X Q. 231. Please give it approximately, if you can, as to each.

A. Not dealing in this line of preparations, I would not be able to state any definite time.

R. X Q. 232. About how many years ago did you first see a specimen of either?

A. Several years ago. I think it could not be less than five or six years ago.

VIRGIL COBLENTZ.

Certificate of Examiner.

STATE OF NEW YORK, }
County of New York, } *ss:*

I, Orange J. Griffin, a notary public for the county of New York, in the State of New York, and acting as special examiner by consent of counsel in the suit of *William R. Warner v. The Searle & Hereth Company et al.*, now pending in equity in the United States circuit court for the northern district of Illinois, hereby certify that the foregoing deposition of Virgil Coblentz was taken before me in behalf of complainant in said city and at the time and place below noted; that there were present at the taking of such deposition Mr. Frank T.

Brown, counsel for complainant; Mr. Philip C. Dyrenforth, counsel for defendants, the witness above named, and as stenographer Miss Ella B. Wright; also one of the defendants, Mr. S. F. Hereth;
256 that the said deposition was taken in the building of the New York College of Pharmacy, in New York city, commencing on the fourth day of April, 1899, at 10 a. m. and was adjourned from time to time and from day to day, as noted in such deposition, and finally completed on the 7th day of April, 1899; that the said Virgil Coblentz was duly sworn by me before the commencement of his deposition, and the questions and cross-questions propounded by counsel and the answers of the witness thereto, and the objections of counsel, and other proceedings, were duly transcribed upon the typewriter by Miss Ella B. Wright, who acted by consent of counsel and in presence of the persons above named; that the deposition of the witness was read by him and corrected before signing and finally signed by him in my presence; that five exhibits were offered and introduced in evidence during the taking of such deposition and were duly marked by me with the title of the case and the names below given, namely:

"Complainant's Exhibit Savory & Moore Pancreatin," "Complainant's Exhibit Fairchild Trypsin, Otherwise Called Pancreatin," "Complainant's Exhibit Fairchild's Extract Sample, Otherwise Called Pancreatin," "Complainant's Exhibit Reed's Pancreatin," "Complainant's Exhibit Armour's Pancreatin;" that said deposition, together with the exhibits referred to, are hereby returned to the clerk of the circuit court for the seventh circuit, pursuant to 67th rule in equity. I further certify that my legal fees for taking such deposition and certifying the same were paid by complainant.

In witness whereof, I have hereunto set my hand and seal, this 8th day of April, 1899.

ORANGE JUDD GRIFFIN,
Notary Public in and for the County of New York and State of New York, Acting as Special Examiner by Consent.

257 COMPLAINANT'S EXHIBITS. 258

COMPLAINANT'S EXHIBIT DR. BATE'S WM. R. WARNER PRESCRIPTION.

44266
2/7-98 50

A. C. MUSSELWHITE, PRESCRIPTION DRUGGIST,
STORES: 111 South Clark Street, Methodist Church Block.
358 South State Street, Near Harrison.
86 Van Buren Street, S. E. Cor. Dearborn, ("Old Colony Blg.")
Established 1869.

℞

Liq. Pancreopepsine ʒ iv

Dose: Teaspoonful 3 times a day before meals.

J. W. BATE M. D.

COMPLAINANT'S EXHIBIT DEFENDANTS' TRADE-MARK.

LIQUID

PANCRO-PEPSIN

Each fluid ounce represents

PANCRO-PEPSIN, 40 GRS.

Dose–1 to 4 Teaspoonfuls

THE
SEARLE & HERETH
Co.
Pharmaceutical Chemists
CHICAGO.

258 COMPLAINANT'S EXHIBIT TRADE-MARKED WRAPPER.

WM. R. WARNER & CO.'S

LIQUID

PANCREOPEPSINE

(Warner's Digestive Fluid.)

A Remedy for

INDIGESTION,

Containing Pancreatine, Pepsin,
Lactic and Muriatic Acids, Etc.

Each Tablespoonful contains 5 grains Pepsin.

THE COMBINED
PRINCIPLES OF DIGESTION

To Aid in Digesting

ANIMAL AND VEGETABLE

COOKED FOOD,

Fatty and Amylaceous Substances.

DOSE

Tablespoon after each meal

Take an Aperient Pill Occasionally.

WM. R. WARNER & CO.,

PHILADELPHIA.

Price, One Dollar.

Trade-mark Registered, 1882.

259 COMPLAINANT'S EXHIBIT DEFENDANTS' PRICE-LIST.

May 1895

Price-list

The Searle & Hereth Co.

Manufacturing chemists

73–75 Wells street

Cor. of Illinois St.

Chicago

Pancro-pepsin.

This preparation is a reliable digestive agent, embracing in eligible form the principles necessary to the digestion of food.

Formula.

Pure pancreatin, 6 ozs.; pure pepsin, 8 ozs.; vegetable ptyalin, 4 drs.; lactic acid, 5 fl. drs.; hydrochloric acid, 5 fl. drs.; sugar of milk.

Pepsin is a secretion of the glands of the stomach, the active principle of the gastric juice, and possesses the property of converting albumin and fibrin into peptone.

Pancreatin is a secretion of the pancreas, emulsifies fats and converts starch into sugar.

Ptyalin is found in the saliva, and converts starch into sugar and dextrine.

Lactic and hydrochloric acids are the normal constituents of the gastric juice and are necessary to the action of pepsin.

260 This preparation is of great value in the treatment of the various disorders of the stomach and bowels dependent upon a deficiency of the digestive ferments, or incident to the debility induced by long sickness. It is also useful in acute attacks of indigestion induced by over-eating. Its value has also been noted in the vomiting of pregnancy.

Dose, 5 to 15 grains after each meal, or when depressed by a distress of the digestive organs.

Pancro-pepsin (powder), in 1-lb. bottles, incl., per lb.....	$6 40
Pancro-pepsin (powder), in ½-lb. bottles, incl., per lb.....	6 60
Pancro-pepsin (powder), in ¼-lb. bottles, incl., per lb.....	6 80
Pancro-pepsin (powder), per dozen ounces.....	6 00

Pancro-pepsin tablets.

Each tablet contains 5 grains Pancro-pepsin.

In bottles of 1 lb., for dispensing, each	$8 00
In bottles of 1,000, for dispensing, each	6 00
In bottles of 500, for dispensing, each	3 00
In bottles of 100, for retailing, per dozen	9 00

Pancro-pepsin and bismuth tablets.

Each tablet contains 3 grs. Pancro-pepsin, 2 grs. subnitrate bismuth.

In bottles of 1 lb., for dispensing, each	$8 00
In bottles of 1,000, for dispensing, each	6 00
In bottles of 500, for dispensing, each	3 00
In bottles of 100, for retailing, per dozen	9 00

Pancro-pepsin, bismuth and strychnine tablets.

Each tablet contains Pancro-pepsin, 3 grains; subnitrate bismuth, 2 grains; strychnine, 1-128 grain.

In bottles of 1 lb., for dispensing, each	$8 00
In bottles of 1,000, for dispensing, each	6 00
In bottles of 500, for dispensing, each	3 00
In bottles of 100, for retailing, per dozen	9 00

261 Pancro-pepsin, with charcoal tablets.

5 grains each.

These tablets are made from our well-known Pancro-pepsin, combined with pure willow charcoal, thus adding the deodorant and absorbent property of the charcoal. These tablets are especially recommended on account of their containing accurately weighed doses, and are readily carried about by the patient so as to be conveniently taken whenever indicated.

In bottles of 1 lb., for dispensing, each	$8 00
In bottles of 1,000, for dispensing, each	6 00
In bottles of 500, for dispensing, each	3 00
In bottles of 100, for retailing, per dozen	9 00

Pancro-pepsin elixirs and syrups.

The properties of these preparations in general are those of Pancro-pepsin, as outlined above. They are sometimes preferred to it, however, where other tonics are indicated as well as digestives.

	Per gal.	Per 5 pints.	Doz. pints.
Elixir Pancro-pepsin	$7 00	$4 50	$12 00
Elixir Pancro-pepsin with beef, iron and wine..	5 00	3 25	9 00
Elixir Pancro-pepsin with bismuth	7 00	4 50	12 00
Elixir Pancro-pepsin with bismuth and strychnine	7 00	4 50	12 00
Elixir Pancro-pepsin with gentian and iron chloride	7 00	4 50	12 00
Elixir Pancro-pepsin with phos. I., Q. and strych.	7 00	4 50	12 00
Liquid Pancro-pepsin	7 00	4 50	12 00
Syrup Pancro-pepsin with phos. L. S. P. and I..	7 00	4 50	12 00

262 COMPLAINANT'S EXHIBIT STOLZE PRESCRIPTION.

Dr. William M. Cate.

Suite 1209, Columbus Memorial bldg., S. E. cor. State & Washington Sts.

Hours: 11 to 1 and 2 to 4. Telephone, Main 752.

℞

Liq. Pancreopepsin

℥ iv

Sig 3tt after meals.

Cate

No. 42009
Feb. 9, 1898
Price 63
Copy

COMPLAINANT'S EXHIBIT CERTIFICATE OF REGISTRATION OF TRADE-MARK.

No. 9911.

The United States of America to all to whom these presents shall come:

This is to certify that by the records of the United States Patent Office it appears that William Richard Warner, of Philadelphia, Pennsylvania, did, on the 18th day of November, 1882, deposit in said office for registration fac-similes of a certain trade-mark for a remedy for indigestion, and the date of the receipt thereof was duly noted and recorded; that on the 18th day of November, 1882, he deposited therewith a statement, and a written declaration under the oath of himself, the said William Richard Warner, copies of all of which are hereto annexed; and the said applicant, having made the payment of a fee of twenty-five dollars, and complied with the

regulations in such cases prescribed by the Commissioner of Patents and in all other respects complied with an act of Congress
263 approved March 3, 1881, entitled "An act to authorize the registration of trade-marks and protect the same," the said fac-similes, statement, and declaration were duly recorded, and the said trade-mark has been duly registered in the said Patent Office this 26th day of December, one thousand eight hundred and eighty-two and protection therefor will remain in force for thirty years from said date unless sooner terminated in accordance with section 5 of said act.

In testimony whereof the seal of the Department of the Interior is hereto affixed this twenty-sixth day of December,
[L. S.] 1882, and of the Independence of the United States the one hundred and seventh. Given under my hand at Washington, D. C.

E. M. MARBLE,
Commissioner of Patents.

UNITED STATES PATENT OFFICE.

WILLIAM RICHARD WARNER, of Philadelphia, Pennsylvania.

Trade-mark for a Remedy for Indigestion.

Statement and declaration of trade-mark No. 9911, registered December 26, 1882.

Application filed November 18, 1882.

Statement.

To all whom it may concern:

Be it known that I, William Richard Warner, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, and doing business at Philadelphia, in the said county and State, have adopted for my use a trade-mark for a medicinal preparation which is intended as
264 a remedy for indigestion, of which the following is a full, clear, and exact specification.

My trade-mark consists of the word "Pancreopepsine." This has generally been arranged, as shown in the accompanying fac-simile, in connection with the word "Liquid;" but the word "Liquid" and other language may be omitted and changed at pleasure without materially altering the character of my trade-mark, the essential feature of which is the arbitrarily selected word "PANCREOPEPSINE."

This trade-mark I have used continuously in my business since July 1, A. D. 1876.

The class of merchandise to which this trade-mark is appropriated is a medicinal preparation, and the particular description of goods comprised in such class on which I use the trade-mark is a remedy for indigestion.

It has been my practice to print this trade-mark, in such colors as would best suit the purpose, upon labels, which I attach to bottles or boxes containing the aforesaid preparation, also upon wrappers for same, and to stencil or print it upon shipping cases. Said trade-mark may also be blown upon the glass bottles containing the preparation.

WILLIAM RICHARD WARNER.

Witnesses:
THOMAS. D. CONDIE.
FRANK M. RAMSEY.

Declaration.

STATE OF PENNSYLVANIA, } ss:
County of Philadelphia, }

William Richard Warner, being duly sworn, deposes and says that he is the applicant named in the foregoing statement; that he verily believes that the foregoing statement is true; that he has at this time a right to the use of the trade-mark therein de-
265 scribed; that no other person, firm, or corporation has the right to such use, either in the identical form or in any such resemblance thereto as might be calculated to deceive; that it is used by him in commerce with foreign nations or Indian tribes, and particularly with New South Wales and Victoria, and that the description of fac-similes presented for record truly represent the trade-mark sought to be registered.

WILLIAM RICHARD WARNER.

Sworn and subscribed before me, a notary public, this second day December, 1882.

[L. S.] W. W. DOUGHERTY,
Notary Public.

DEFENDANTS' EXHIBIT ARTICLES FROM UNITED STATES DISPENSATORY, A.

"Pancreatic emulsion.—As it is generally admitted that, among the offices of the pancreatic juice, is that of emulsionizing fatty matters that may pass through the stomach undigested, so as to facilitate their absorption, it would appear highly probable that this secretion might prove useful in cases in which fats are digested with difficulty if at all. Dr. Horace Dobell, physician to the 'Royal Infirmary for Diseases of the Chest,' having noticed that consumptive patients are very apt to have a dislike for fat, and thinking that this dislike might result from an inability to digest this kind of food, reasonably inferred that the pancreatic secretion might prove useful in these cases by supplying the wanted power. He

was, therefore, induced to treat a series of consumptive cases of this kind with the pancreatic juice of the pig which he gave in the form of emulsion with the fat of beef, stirred in milk. His expectations were confirmed by the results. The great majority of cases were improved by the remedy, which he now confidently recommends. The preparations which he prefers are pancreatic emulsions of cod-liver and lard oils. In this connection, the pancreatic juice remains sound for a long time; though, unmixed with fat, the juice speedily undergoes decomposition. The emulsion with cod-liver oil, as prepared by Messrs. Savory and Moore, of London, has the appearance of a white paste, and the consistence of thick clotted cream. The dose is from one to three teaspoonfuls one or twice daily, in a cup of milk, to which a little brandy may be added. (See *Am.*
267 *Journ. of Pharm.*, March, 1866, p. 143; from *The Chemist and Druggist*, Jan. 15, 1866.)

"The name of *pancreatine* has been conferred on the pancreatic juice itself, which was brought to the notice of medical men, by Dr. G. Harley, so early as 1858, 'as uniting in itself the properties of all the digestive fluids.' But Dr. Dobell appears to have first carried the idea into effect; though it was not till September, 1864, that his communication was published in the *Lancet*. It has been suggested that, if the juice really acts beneficially in aiding the digestion of the fatty ingredients of food, it would be best to administer it, not previously mixed with fat which probably neutralizes it; perhaps in spirit which dissolves it readily. (*Pharm. Journ.* Feb. 1, 1866, p. 405.)"

DEFENDANTS' EXHIBIT ARTICLES FROM UNITED STATES DISPENSATORY, B.

"Rennet. Gastric juice. Pepsine.—As a remedial agent, the gastric juice of the inferior animals has been used in three forms; 1. that of the fresh liquid taken from the stomach, 2. that of rennet, or an infusion of the dried stomach, in wine or water, and 3. that of a preparation called pepsine.

"1. *Gastric juice* is a liquid secretion of the mucous membrane of the stomach, whereby nitrogenous food is rendered soluble and capable of being absorbed, and other changes are effected essential to healthful digestion. Various methods have been employed for extracting it from the stomach for experiment, which it is unnecessary here to describe. For use in medicine, the most convenient method is to collect it from the stomach of animals killed fasting, as the hog, sheep and calf, and then deprive it, by filtration of the mucus and undigested alimentary matters mingled with it.
268 In this state it is a limpid liquid, slightly yellowish or brownish-yellow, heavier than water, of a somewhat saltish taste, and a characteristic odor, which, when the juice is heated, resembles that of soup. It usually has an acid reaction. At the temperature of 100° or lower, it has the property of dissolving nitrogenous articles of food, and, without affecting starch, of changing

glucose or the sugar of grapes into lactic acid. When separated from its attendant acid, it loses in a greater or less degree this solvent power, which it recovers upon the addition of lactic or muriatic acid. The idea has been advanced that, in normal digestion, it supplies itself with the requisite lactic acid by converting into that substance the glucose taken into the stomach, or resulting from the reaction of saliva or the gastric mucus upon starch. But in cases where no starch is taken, there must be other means of supplying the necessary acid. When the juice is heated to the boiling point, it becomes turbid, and loses the solvent property. The same change takes place more slowly at the temperature of 122° F. Strong alcohol causes a deposition of solid matter, and impairs the digestive power. Tannin produces a precipitate which has no influence on food. Some of the metallic salts, as bichloride of mercury and acetate of lead, also produce a precipitate; but this, when deprived of the metallic oxide, regains the characteristic solvent property. Pure gastric juice contains about 97 per cent. of water, 1.75 of salts, a free acid, and 1.25 of a substance, which has been considered by some chemists as a distinct organic principle, and has received the name of *pepsin*. (*Boudault, Journ. Pharm.*, Sept., 1856, p. 162.) This principle is nitrogenous, and is believed to have the properties of a ferment, whereby the gastric juice is enabled, with the assistance of an acid, to exercise its peculiar power over food. It may be separated from the gastric
269 juice by first precipitating this with a metallic salt, as the acetate of lead, and then decomposing the metallic precipitate by sulphuretted hydrogen, which throws down the metal as a sulphuret, and leaves the pepsin in solution. The liquid is then evaporated at a very gentle heat, and the pepsin is left in the form of a soft, viscous substance, which can with difficulty be brought to a dry state without addition. But it is very doubtful whether the substance thus procured, though it has the digestive power of the gastric juice, is a pure proximate principle; as, in the purest state in which it has been obtained, it does not yield identical results on analysis. When gastric juice is completely protected from the air, it may be kept unchanged for a long time; but, on exposure, it speedily undergoes decomposition, acquires a very offensive odor, and loses its characteristic digestive property. The juice itself is almost never used internally; but, more than forty years ago, it was employed by Dr. P. S. Physick, the celebrated surgeon of Philadelphia, with considerable success, as a local application to cancers and sloughing ulcers, with a view of removing the dead bone and flesh, correcting the offensive odor, and yielding a healthful stimulus to the diseased surface. It has also been used with success, by Dr. Ellsworth, of Hartford, Connecticut, for dissolving a portion of tough animal food, which has become impacted in the œsophagus of a lad affected with stricture of that passage. The gastric juice of a pig was used. (*Bost. Med. and Surg. Journ.*, April 17, 1856.) The inner coat of the gizzard of the S. American ostrich is said, in the state of powder to be used in Buenos Ayres, as a remedy in dyspepsia. (E. S. Wayne, *Am. Journ. of Pharm.* March, 1868, p. 123.)

"2. *Rennet.*—This is an aqueous or vinous infusion of the
270 dried stomach of the calf, though that of the sheep or other animal would probably answer the same purpose. It is much used, as every one knows, for curdling milk; a property which it owes to a portion of the gastric secretion, retained and dried in the mucous tissue of the stomach. To the same material it probably owes the property which it possesses of converting glucose into lactic acid; and there is little doubt that it is capable, in greater or less degree, of exercising the solvent property of gastric juice over albuminous and fibrinous food. The first of the properties just referred to suggested to Dr. James Gray, of Glasgow, the use of rennet in diabetes, with the object of promoting the conversion of any sugar of grapes that might be formed in the stomach into lactic acid, and thus preventing its entrance into the circulation in its unchanged state. He met with considerable success in this use of the remedy; and it has since been employed by others, in the same disease, with supposed advantage. Dr. Gray gave a teaspoonful of the rennet after each meal. To be efficient it must be recently prepared, and of such strength that a teaspoonful will coagulate a pint of milk in five minutes. (*Ed. Monthly Journ. of Med. Sci.*, Jan. 1853, p. 31.) Rennet seems also to have been popularly employed for promoting defective digestion, in the west of England. (*Med. Times and Gaz.*, April 1857, p. 411.) It is highly probable that the preparation, usually employed to curdle milk, may contribute to the ready digestibility of the curds and whey, so favorite an article of diet among children in this country. Dr. Geo. Ellis gives the following method of preparing *rennet wine*, from which he has obtained the most satisfactory results, when pepsin from inadequate preparation had failed him. Take the stomach of a calf immediately after death, cut off and reject about three inches of the upper or cardiac portion, slit the
271 stomach longitudinally, wipe it gently with a dry napkin so as to remove as little of the clean mucus as possible, then cut it into small pieces, the smaller the better, put it into a common wine bottle, fill the bottle with good sherry, and let it stand corked for three weeks. The dose is a teaspoonful in a wineglassful of water, immediately after each meal. It is known to be good if a teaspoonful will coagulate half a pint of milk in two minutes at 100° F. (*Dub. Med. Press*, July 16, 1862.)

"3. *Pepsine.*—Various attempts have been made to concentrate, and bring to a convenient form for administration, the peptic principle of the gastric juice. It must not be supposed that the subs ances prepared with this object and sold under the name of pepsine, have any claim to be considered as the pure principle, which, for the sake of distinction, may be called *pepsin*. The one which approaches nearest that condition is the pepsine prepared by M. Boudault. His process is as follows. The rennet bags of sheep, quite fresh, are opened, turned inside out and washed by a gentle stream of water; the mucous membrane is then scraped off, bruised in a mortar so as to rupture the cells, and digested for twelve hours in pure water. The infusion thus obtained is precipitated by acetate of lead, and the precipitate, consisting of pepsin and oxide of lead, is mixed with

water and decomposed by sulphuretted hydrogen, which throws down the lead, leaving the pepsin in solution. The liquid, having been filtered, is evaporated, at about 100° F., to a syrupy consistence; after which sufficient perfectly dry starch is added to absorb the semi-liquid matter, and bring it to the state of a dry powder. Lactic acid is sometimes added in small proportion to the liquid before evaporation, and no doubt contributes to its efficiency. An attempt to evaporate to dryness might injure the preparation; and at best a matter would be obtained, strongly disposed to ab-

272 sorb moisture, and consequently to undergo putrefaction.

Starch is chosen for the solidification of the syrupy mass, on account of its absorbent property, and because it is not affected by the digestive power of the pepsin. If properly prepared, 15 grains of Boudault's pepsine, with the aid of a little lactic or muriatic acid, if the former was not employed in the process, will cause the solution in water of four times its weight of fibrin at the temperature of the human body; and the amount of starch added in the process is proportioned to this result. (*Pharm. Journ.* xvi. 472.) Much care is requisite to use fresh rennet bags, before they have begun to undergo decomposition, and not to allow the temperature used in evaporation to exceed 100° F. It is asserted, of the pepsine of Boudault, that it has the reactions of the gastric juice above referred to, and is fully capable of replacing that liquid for the purposes of digestion. It may be given either with or without lactic or muriatic acid; the addition being unnecessary when there is already sufficient acid in the stomach. A spurious substance has been sold for it; but may be distinguished by the difference of its reactions, and an agency in dissolving fibrin. The genuine pepsine, dissolved in water, is precipitated by acetate of lead, tannic acid, and strong alcohol; and 15 grains of it should, in 12 hours, effect the solution of a drachm and a half of boiled white of egg, or chopped meat, in a half a fluid ounce of water, at 100° F. (Ballard, *Med. Times and Gaz.*, Feb. 1857, p. 177.) The *the* spurious substance is destitute of these properties. Another test of the activity of pepsine is its power of coagulating milk; and the rapidity with which it produces this effect, and the quantity required to produce a certain degree of effect, are measures of its efficiency. The process of M. Boudault essentially has been adopted in the last edition of the French Codex (1866).

273 "The idea of employing the gastric juice, or some representative of it, in order to promote digestion, is not new; and it would be difficult to determine to whom the original use of this remedy is to be ascribed. According to Boudault, however, the application of the *principle* pepsin to this purpose was first suggested by Dr. Corvisart, of Paris. (*Journ. de Pharm.*, xxx. 169.) Boudault's preparation has been used by many practitioners with good effects, if we may judge from the reports made in the journals. The particular condition to which it is applicable is that of debility of stomach from whatever cause arising, in which gastric juice is not produced in sufficient quantity, or of sufficient power, to enable the requisite amount of food to be digested. In such cases, the debility of the

stomach is kept up by the want of due nutrition of the organ, originating in its own defective function; and it has, therefore, no power of recovering its healthy condition. Artificial digestion supplies the deficient nutriment; and the stomach, being now duly nourished, resumes its proper function. Dyspepsia, the debility of stomach following chronic gastritis, and that attendant upon convalescence, and certain exhausting diseases, such as phthisis, afford suitable occasions for its use. It is thought to have proved useful in the vomiting of pregnancy, and has been highly recommended in the diarrhœa of infancy which often proceeds from irritation of the bowels from imperfectly digested food. The dose of Boudault's preparation is 15 grains before each meal, to be taken in powder, or suspended in soup or syrup. Boudault recommends specially the syrup of cherries, as well calculated to cover its disagreeable taste. M. Besson prefers the syrup of bitter orange peel, which he has found preferable to other vehicles by its perfume and its tonic properties. He prepares pepsine for administration in the following manner:

274 To the liquid product obtained from fifty rennet bags, of which the evaporation is stopped when 2300 grammes remain he adds 11 grammes of lactic acid, 100 grammes of tincture of bitter orange peel, and 110 grammes of extract of curacoa; then filters, adds 450 grammes of sugar, dissolves, and filters. Thirty grammes of this syrup contain 15 grains of acidified pepsine. The syrup will keep a long time without change (*Journ. de Pharm.*, 4e sér., iv. 54). There is no incompatibility between it and other remedies usually employed in similar cases, such as the simple bitters, quinia, nux vomica, the chalybeates and opiates."

DEFENDANTS' EXHIBIT ARTICLE FROM AMERICAN JOURNAL OF PHARMACY, 1871.

"A combined solution of pepsine and pancreatine.*

"The value of pepsine as a remedial agent in cases of indigestion is generally admitted, but experience has proved that it is only in certain forms of indigestion that it is of use.

"Food is divided into two classes, nitrogenized and unnitrogenized. The former, being digested in the stomach, is acted on by pepsine; the latter digested in the intestine, escapes its action almost altogether. The only action pepsine, as it appears in the gastric juice, seems to have on fat is to dissolve the albuminous cell wall, so leaving the fat free to be acted upon by the pancreatic secretion. This suggests a probable cause of indigestion; for if the gastric fluid be deficient in quantity or quality, the albuminous cell walls of the fat may not be dissolved, the fat is not acted on sufficiently

275 by the pancreatic secretion, and not being emulsified, cannot be taken up by the lacteals. On the other hand diseases of the pancreas or intestine, by checking the absorption of fat, may

*Abstract of a paper by Richard John Kinkead, B. A. and M. T. C. D., in the *Lancet*, No. xx, vol. ii, 1870.

cause indigestion incurable by pepsin. This indigestion should be treated by pancreatine, the chief action of the pancreatic secretion being the emulsion of fats.

"There being two classes of food to be digested, each in a different portion of the digestive tract, it is evident that the more perfectly one is digested the more easily will the other be. If the stomachic digestion be weak, the fat granules are not set free nor the fibrine dissolved as they should be; the consequence being that the pancreatic secretion cannot do its work properly. If the intestinal digestion be weak, the emulsifying of the fats as they pass from the stomach being imperfectly performed, the food is detained longer in the stomach than is right, the proportion of fat to fibrine is increased, the fat enveloping the nitrogenized food hinders the action of the gastric juice, and acidity and stomachic indigestion are produced. In treating stomachic indigestion, therefore, it is important to accelerate the digestion of fatty and saccharine portions of the food; and in intestinal to accelerate and perfect the digestion of the albuminoids. There are also cases in which the digestion of both the nitrogenized and unnitrogenized food is at fault.

"Impressed with the foregoing ideas, Mr. Edward Long, of Dublin, sent to the author a sample of his solution of pepsine in glycerine, asking him to try it in practice, and give his opinion upon it. The author, however, thought that a solution of pepsine and pancreatine, combined in suitable proportions, would fulfill the conditions necessary for a perfect digestive. He therefore suggested to Mr. Long the preparation of such a solution. The result of the experiment is given in a letter from Mr. Long to the author,
276 from which we give the following extracts:

"'Following up the subject of our conversations some time since, I have been making experiments on pancreatine obtained directly from the fresh pancreas of the calf. The result has been quite what might have been expected from *a priori* reasoning, as you will see from the subjoined statements.

"'Some difficulty was experienced in obtaining the solution of pancreatine in an eligible form for administration; but at last I succeeded in producing what as closely as possible represents the digestive fluids found in man. It is composed of pepsine and pancreatine in suitable proportions, using for the former a solution of pepsine introduced by me some time ago, and adding the solution of pancreatine as now prepared.

"'In the experiments made to test its effects a very curious result was observed. Meat—beef and mutton—digested in pepsine alone was found to be entirely dissolved with the exception of the fat, which floated as a film on the surface, and the film was entirely emulsified when a proper quantity of pancreatine was added, and the usual conditions as to temperature, etc., attended to. This is exactly what we might expect, reasoning from known physiological principles.

"'Pepsine in an effectual form has been a great boon; but, as I have shown above, it will not digest the oily or fatty aliments; failing thus to supply the system with the substances vitally neces-

sary in strumous diseases. It is obvious how desirable the action of this fluid will be as an addendum to the use of cod-liver oil.

"'The pancreatic emulsion has never seemed to me the nicest or most eli*b*ible mode of effecting what is desired. It is nauseous to the taste of many, and often keeps badly; the quantity of mutton suet employed, which may be supposed to be all the fatty matter the pancreatine present is capable of emulsifying, is not as much as might be desirable in many cases. In some, suet at all may not be the most suitable form of fat. The food I now describe is very palatable, and will keep almost any time. It may be given
277 with any kind of food. My experiments were made with fat mutton chops and rich beefsteaks, as typical aliments, with most satisfactory results.

"'The first experiments, thrice repeated, were made with muriatic acid, water, and the combined solution, to represent the gastric juice and pancreatic secretion. The second, with solution of pepsine alone, with acid and water, followed by the addition of the plain pancreatic solution after an interval of two hours. Both were entirely satisfactory; but the latter were peculiarly interesting in a physiological point of view, as stated above, and tended to show the exact part played by each fluid in the animal economy. But as the administration of two fluids in succession would be troublesome in practice, and be scarcely attended to by patients (at all times averse to trouble), I have thought it desirable to mix the two in one fluid. This has the advantage of being quite agreeable, as liquor of pepsine always is; while the taste of the liquor of pancreatine is entirely concealed by the former. Some medical friends of mine reported most favorably of it, after trial in practice.

"'The experiments in the laboratory were as follows:

"'No. 1. Mutton (fat and lean about equal parts), one ounce; water, one ounce and a half; muriatic acid, fifteen minims; solution of pancreatine and pepsin one drachm. Digested at 100° for four hours, this was converted into a homogeneous pulp, and then diluted with a little water, presented quite a *chylous* appearance.

"'No. 2. Beef (fat and lean), an ounce and a half. Treated in the same way, with same result, the pulp being much deeper in color.

"'Nos. 3 and 4. I then operated on the same quantities of each, first digesting with pepsine solution alone, as intimated above, and then adding the liquor pancreatine—keeping up the heat. In these latter experiments the result seemed more perfect, but, as I have said, the same procedure would be rather inconvenient in practice.
278 "'The results were found to be identical in three successive experiments, at intervals of several weeks.'—*Pharm. Journ. London, Nov. 19th*, 1870."

DEFENDANTS' EXHIBIT ARTICLES FROM AMERICAN JOURNAL OF PHARMACY, 1873, A.

"*Notes on Pepsin.*

"By Edward H. Hoskin, M. D., Lowell.

"Much has been said about physicians' prescriptions being inaccurately compounded, and much fault found with the incompetency of apothecaries and their assistants—frequently, no doubt, without injustice to either party. As much fault may be found with some of the preparations, because of their impurities, and often of the positive inertness of what should be the active principle on which the efficacy of the drug depends. Amongst these preparations, pepsin is particularly alluded to.

"The market is flooded with pepsin, of German, French, English and American manufacture, its elixirs, wines and troches—elixirs *per se*, and in alleged combination with bismuth, iron, strychnia, etc.—in fact, so elegantly, and apparently therapeutically combined, as to please the eye, taste and judgment of the physician, and by its promised combination, to appear to him as the very thing he wants in his daily practice. All is not gold that glitters, nor is all pepsin that is called so, nor do all its preparations contain the promised principle.

"Curiosity at first induced me to examine a sample of Boudault's pepsin, and getting a negative result, I still more carefully tried three other samples of the same make, and found all inert; I then tried Velpeau's, and with the same result, and then various samples of American preparations, but not one could I find that was in
279 any way a solvent of coagulated albumen. I next tried some elixirs, and not one of these would produce the required result; then some of the wines, and with the same lack of success.

"After these experiments, I came to the conclusion that pepsin as sold in the shops, was a fraud, that physicians were defrauded of their success, and the patient of his health and his means, through the worthlessness of the drug supplied.

"But on looking over a review of the new Pharmacopœia, in the Journal of March 13th, I noticed the mention of the pepsin made by Scheffer, of Louisville, and being anxious, of possible, to find a reliable article, I wrote to him for a sample, and received by mail two descriptions—'saccharated pepsin,' and 'concentrated pepsin.' I at once experimented with them, and obtained most excellent results. With one grain of the concentrated article, I obtained the solution of one hundred grains of coagulated albumen, and with five grains of the saccharated, sixty grains of albumen—in each case using one ounce of water and six drops of muriatic acid. With one grain, also of the former, I procured the solution of 137 grains of raw, lean beef.

"These results are, I think, eminently satisfactory, and prove, at least, that there is one reliable article to be had—of home manufact-

ure, also, instead of heavily dutied foreign goods, and which so frequently are considered the only reliable preparations.

"I have been sceptical as to the therapeutic value of the so-called pepsin wines and elixirs, and my experiments have proved that, at all events, the pepsin used in their manufacture is not of any use, for there is no solvent action exerted whatever on coagulated albumen by any of them I have yet tried.

"This may be the proper place to describe the method I
280 adopt for detecting the presence of what I will call active pepsin.

"It is well known that the presence of albumen in diabetic urine is an obstacle to the detection of the sugar, and that a fine mauve or purple color is produced on the addition of either Trommer's or Fehling's test solution. It occurred to me that this reaction would just come in for my purpose. Take coagulated albumen and put into the pepsin wine or elixir; submit to one hundred degrees Fahr. in a water bath, and if there is any of the active peptic principle present, solution of so much of the coagulum will ensue, and the albumen reduced to an allotropic condition, which, when added to the test solution, would produce the purple color.

"On trying the experiment, no such thing occurred; but, on making a simple solution of pepsin in water, adding acid and albumen, and digesting for half an hour, I procured a solution which, on addition of the cupreous test, at once yielded the splendid color; repeated trials have yielded the same results. Flesh, or cheese, may be used in place of albumen, as all that is required is to obtain a peptone, and the reaction will show it; hence proving that pepsin must have been present in order to its production.

"I have repeatedly dissolved a perfectly good pepsin in sherry wine, added chlorhydric acid and albumen, and submitted to a water bath and then tested for peptone; but in no case have I been able to detect it. From this fact, I conclude that pepsin wines are useless, as far as the drug is concerned, and that the presence of the alcohol, or the small proportion of tannin, or both, destroys its catalytic action. Tannin, in solution, does the same thing. So, also, do most metallic salts; and here I would quote from Dr. T. King Chambers 'On the Indigestions,' page 94:—'But for the time named, I advise its being given alone, and the action
281 not interfered with in general by other medicines. *Many* will really *prevent* its *chemical effect*, and all will confuse one's judgment of the advantage gained.'

"But, if to a peptone already formed, either wine, alcohol, tannin, or a metallic salt is added, the addition of the test will at once exhibit its reaction, though tannin, if in large quantity, somewhat masks it. From this, it appears that the failure of the test to indicate pepsin in wine or dilute alcohol, or in the presence of tannin, or a metallic salt, does not result from the action being masked, but from the fact of the pepsin (under the conditions) being inert.

"If, then, these elegant pseudo-pharmaceutical preparations will not accomplish the conversion of a protein substance into a peptone in the test tube, there is, I think, small likelihood of their doing so

in the disabled stomach. It is true the other ingredients may be of service, but often it is the pepsin that the physician is prescribing the compound for, and frequently the one thing the patient most requires; so that if the above conclusions are true, then, indeed, are physicians laboring in the dark, and their patients done out of their health and their money.

"Since writing the above, I have tried samples of Dr. Hawley's preparation, and find that this wine and glycerole of pepsin are good articles, but the wine does not appear to be a pure sherry, and the proportion of alcohol so small as not to interfere with the functions of the principle. They both will dissolve albumen, but not so actively as Scheffer's.

"I give these few facts for what they are worth, and hope at least they may be of some service to the profession, especially to those who have not the time for making the investigations they
282 otherwise would do, and to those who may have been disappointed in not obtaining results they may have been led reasonably to expect.—*Boston Med. and Surg. Journ., May 22d*, 1873."

DEFENDANTS' EXHIBIT ARTICLES FROM AMERICAN JOURNAL OF PHARMACY, 1873, B.

"*Notes on Pancreatin.*

"By Richard V. Mattison.

"(Read at the Pharmaceutical Meeting, November 18.)

"The increasing popularity of pharmaceutical preparations of this valuable substance induces the writer to offer to the profession a few notes on the subject, hoping they may be of service in the elimination and proper exhibition of it in a medicinal form, which will be pleasant and agreeable both to the sight and palate.

"Prefacing these remarks, a short notice of the pancreas and its action will be found interesting. This is situated within the curve formed by the duodenum, and opens into the intestine by a duct common to itself and liver. In its anatomy it closely resembles the salivary glands, and the fluid elaborated by it, called *pancreatic fluid*, appears almost identical with ptyalin. Like this secretion, pancreatic fluid, when pure, is a colorless, transparent and slightly viscid liquid, alkaline when fresh, quickly, however, on standing, becoming first neutral and then acid, differing, however, from saliva in containing no sulphocyanogen. It resembles albumen in being nearly wholly coagulated by heat, and also by the mineral acids, especially when concentrated; precipitated also by alcohol. When this precipitated coagulum is separated from the liquid, and water added to it, it is soluble, thus essentially differing from albumen.

283 "Its specific gravity is from about 1.008 to 1.009, and contains from 13 to 19 per cent. of solid matter, of which, according to Sehmidt, about 12½ per cent. is pancreatin.

"The action of this peculiar principle upon starch is to change it to glucose, and upon fatty and oily substances to quickly emulsify them, thus rendering them easily absorbed and assimilated by the lacteals.

"Bernard supposed the fat to be composed, and Fownes also states that the fat is resolved into fatty acid and glycerin. This is denied by most recent writers, and such is certainly not its principal action, no saponification apparently taking place, which fact may be easily proven by thoroughly mixing, with agitation, a solution of pancreatin with cod-liver oil. After emulsification, which almost immediately occurs, the oil may be separated by simply agitating the emulsion with ether or petroleum benzin.

"This emulsification is the essential purpose of the pancreatic fluid, thus breaking up the fatty globules and allowing assimilation to proceed with rapidity, and in this respect is greatly superior to either saliva or albumen. Liquid fats are insoluble in the acqueous albumino-saline fluid, with which the vascular tissues are saturated; consequently no absorption can take place, and the oil passes from the patient in the same state in which it was administered. This occurs most frequently during the administration of cod-liver oil to phthisical patients, and the association of this oil with pancreatin offers a valuable and natural method of administration.

"At the time when the subject was brought to the writer's notice, he was largely engaged in the manufacture of saccharated pepsin by the process of Mr. E. Scheffer (an excellent one, by the way), and the idea suggested itself that perhaps a solution of sodium chloride would precipitate pancreatin in the same manner as it does
284 pepsin. After some preliminary experiments, the following was adopted as furnishing the best result:

"The pancreas are dissected and macerated in water acidulated with hydrochloric acid for about forty-eight hours, then separated, and the acidulated solution of pancreatin passed through a pulp filter until it is perfectly clear. To this clear solution is then added a saturated solution of chloride of sodium and allowed to stand until the pancreatin is separated. This is carefully skimmed off and placed upon a muslin filter and allowed to drain, after which it should be washed with less concentrated solution of sodium chloride, and then put under the press. When all the salt solution has been removed, and the mass is nearly dry, it is rubbed with a quantity of sugar of milk, and dried thoroughly without heat, after which it is diluted until ten grains emulsify two drachms cod liver oil. To this may be given the name of 'saccharated pancreatin.'

"An elixir being suggested for the exhibition of this in an elegant form, the following formula was devised, and we think will be found very agreeable.

"Pancreas	No. vj.
"Acid hydrochlor	f ʒ iv.
"Glycerin	q. s.
"Aqua cong	iss.

"Macerate the dissected pancreas for three days in the mixture of water and acid with Oiiss of glycerin added; then separate the liquid, strain and add f ʒ iiss oil of orange and a sufficient quantity of glycerin, to make the liquid measure Cong. iiss; this is then filtered until perfectly transparent. The result is a sweet acidulous elixir, one fluidrachm of which will easily emulsify half a fluid ounce of cod-liver oil—a valuable addition to the number of preparations combining efficiency with pharmaceutical elegance.

"*Philadelphia, eleventh month* 10, 1873."

285 And on to wit: the twenty-sixth day of January, 1901, there was filed in the clerk's office of said court the following stipulation to wit:

Stipulation. Filed Jan. 26, 1901.

Stipulation.

United States Circuit Court, Northern District of Illinois.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH CO. ET AL. } No. 24787.

It is hereby stipulated and agreed by and between complainant and defendants that the annexed copies of affidavits of William R. Warner, Andrew F. Remick and William R. Warner, Jr., may be substituted in the place of the originals which appear to have been mislaid or lost and filed as of September 26th, 1900.

BROWN & DARBY,
Solicitors for Complainant.
DYRENFORTH & DYRENFORTH,
Solicitors for Defendants.

(Endorsed:) Filed January 26, 1901. S. W. Burnham, clerk.

And on to wit: the twenty-sixth day of January, 1901, in the December term of said court, 1900, in the record of proceedings thereof in said entitled cause, before the Hon. William H. Seaman, district judge, appears the following entry to wit:

Order of Jan. 26, 1901.

Order of January 26, 1901.

WILLIAM R. WARNER
vs.
THE SEARLE AND HERETH COMPANY ET AL. } 24787.

Ordered that leave is hereby given the complainant to file substituted copies of the affidavits of William R. Warner, Andrew F. Remick and William R. Warner, Jr., as of September 26, 1900, as per stipulation filed, the originals appearing to have been mislaid, or lost.

286 And on to wit: the 26th day of January, 1901, there was filed in the clerk's office of said court as of September 26, 1900, the certain affidavit of William R. Warner, in the words and figures following to wit:

Affidavit of William R. Warner. Filed Jan. 26, 1901.

Affidavit of William R. Warner.

Circuit Court of the United States, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER
v.
THE SEARLE & HERETH CO. ET AL. } In Chancery. No. 24787.

Affidavit.

STATE OF ILLINOIS, } ss:
County of Cook. }

William R. Warner, being duly sworn, deposes and says as follows: I am the complainant in the above-entitled suit, and owner of the preparation used as a remedy for indigestion marked with the trade mark or name "Pancreopepsine," and owner of the trade-mark itself. I have full knowledge of the value of such trade-mark as applied to the remedy, and know that the value of the matter in suit largely exceeds, exclusive of interest and costs, the sum of $2,000.00. I have expended upwards of $13,000 in advertising, sampling, etc., on this remedy with the trade-mark applied, and know that the value exceeds the sum expended.

And further deponent saith not.

WILLIAM R. WARNER.

Sworn to and acknowledged before me, a notary public, this — day of September, A. D. 1900.

— —,
Notary Public.

(Endorsed:) Filed January 26, 1901, as of Sep. 26, 1900. S. W. Burnham, clerk.

287 And on to wit: the 26th day of January, 1901, there was filed in the clerk's office of said court as of September 26, 1900, the certain affidavit of Wm. R. Warner, Jr., in the words and figures following to wit:

Affidavit of William R. Warner, Jr. Filed Jan. 26, 1901.

Affidavit of William R. Warner, Jr.

Circuit Court of the United States, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH CO. ET AL. } In Chancery. No. 24787.

Affidavit.

STATE OF ILLINOIS, }
County of Cook, } ss:

William R. Warner, Jr., being duly sworn, deposes and says as follows: I am the son of the complainant in the above-entitled case, and have been associated with him in business for many years, and in the absence of my father, I have charge of the business. I am fully conversant with the business and the values of the different preparations which we manufacture, and particularly with the value of the trade-mark or trade name "Pancreopepsine," applied to the digestive compound which we manufacture and sell. I can certainly state that the matter in dispute in the above-entitled suit largely exceeds exclusive of the interests and costs, the sum or value of $2,000.00.

And further deponent saith not.

WILLIAM R. WARNER.

Sworn to and acknowledged before me, a notary public, this 25th day of September, A. D. 1900.

EDWIN C. SEMPLE,
Notary Public.

(Endorsed:) Filed Jan'y 26, 1901, as of Sept. 26, 1900. S. W. Burnham, clerk.

288 And on to wit: the 26th day of January, 1901, there was filed in the clerk's office of said court as of September 26, 1900, the certain affidavit of Andrew E. Remick, in the words and figures following to wit:

Affidavit of Andrew E. Remick. Filed Jan. 26, 1901.

Affidavit of Andrew E. Remick.

Circuit Court of the United States, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH CO. ET AL. } In Chancery. No. 24787.

Affidavit.

STATE OF ILLINOIS, } ss:
County of Cook, }

Andrew E. Remick, being duly sworn, deposes and says as follows: I am the manager of the Chicago branch of William R. Warner, complainant in the above-entitled cause, and have charge of the business here. I am fully acquainted with the different remedies which are sold by the house, and particularly with the remedy for indigestion, to which is applied the trade-mark or name "Pancreopepsine," and its value. I have myself, personally, travelled largely through the West, disposing of this and other remedies, and have become thoroughly acquainted with its value, and have furthermore received the reports of other travelling men who report to the Chicago house. I can truthfully certify that the value of the matter in dispute in the above-entitled cause largely exceeds the sum of $2,000.00, exclusive of interests and costs.

And further deponent saith not.

ANDREW E. REMICK.

Sworn to and acknowledged before me, a notary public this 25th day of September A. D. 1900.

EDWIN C. SEMPLE,
Notary Public.

(Endorsed:) Filed Jan'y 26 1901 as of Sept. 26, 1900. S. W. Burnham, clerk.

289 Afterwards to wit: on the 18th day of December, being one of the days of the regular December term of said court, 1900, in the record of proceedings thereof in said entitled cause before the Hon. Christian C. Kohlsaat, district judge, appears the following entry to wit:

Order of Dec. 18, 1900, *Granting Leave to Amend Bill of Complaint.*

Order of December 18, 1900.

WILLIAM R. WARNER
vs.
THE SEARLE AND HERETH COMPANY ET AL. } 24787.

Upon motion of complainant, it is hereby ordered that such complainant may take leave to file the affidavits of William R. Warner, William R. Warner, Jr., and Andrew E. Remick, which were presented to the clerk of this court for filing before the hearing of this cause; and which were considered by the court at such hearing, and in rendering the opinion in this cause; and to amend the bill of complaint by inserting a specific statement that the value of the matter in dispute exceeds the sum of two thousand dollars ($2,000.00).

And on the same day to wit, the 18th day of December, 1900, leave of court being first had and obtained the complainant by its solicitors file in the clerk's office of said court a certain amendment to bill of complaint, in the words and figures following to wit:

Amendment to Bill of Complaint. Filed Dec. 18, 1900.

Amendment to bill of complaint.

In the United States Circuit Court, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER
v.
THE SEARLE & HERETH COMPANY ET AL. } In Chancery.

Amendment to bill of complaint.

And the complainant amends the bill of complaint by inserting at the end of the paragraph therein numbered 7, the following paragraph.

"And your orator further shows unto your honors, that the
290 matter in dispute, exclusive of the interest and cost, exceeds the sum or value of two thousand dollars ($2,000.00)."

BROWN & DARBY,
Solicitors for Complainant.

Chicago, Ill., Dec. 18, 1900.

(Endorsed:) Filed Dec. 18, 1900. S. W. Burnham, clerk.

And on the same day to wit the 18th day of December being one of the days of the regular December term of said court, 1900, in the record of proceedings thereof in said entitled cause before the Hon.

Christian C. Kohlsaat, district judge, appears the following entry to wit:

Interlocutory Decree, Dec. 18, 1900.

Interlocutory decree of December 18, 1900.

WILLIAM R. WARNER
v.
THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, and Frank S. Hereth, and O. T. Eastman. } 24787.

This cause having at this term of the court come on to be heard upon the pleadings and proofs submitted, and the court having duly considered the same and heard the arguments adduced by solicitors for both parties, it is

Ordered, adjudged and decreed, that the complainant is the sole and exclusive owner and proprietor of the trade-mark "Pancreopepsine."

That the said trade-mark "Pancreopepsine" is a good, valid and legal trade-mark, when applied to a digestive preparation as the complainant has applied it.

That the defendants, The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, and each and every of them, have violated and infringed upon the complainant's exclusive rights to the use of such trade-mark as applied to a digestive preparation, by marking and using a similar preparation with the designation "Pancro-Pepsin," and delivering and selling the preparation so marked, to persons in the northern district of Illinois and elsewhere.

And it is further ordered, adjudged and decreed, that the complainant do recover of the defendants, and each of them, the
291 profits, gains and advantages, which the said defendants have derived, received or made by reason of the said infringement of said trade-mark of such complainant; and that the said complainant do also recover any and all damages which it has sustained or shall sustain by reason of the said infringement by the said defendants, or either of them.

And it is hereby referred to E. B. Sherman as a master of this court, who is hereby appointed *pro hac vice* to state the account of such gains, profits and advantages, and to assess such damages and to report thereon with all convenient speed. And the defendants, and each of them, are hereby required and directed to attend before said master from time to time as required, and to produce before him books, papers, vouchers and documents of each and all of said defendants, and to submit to such oral examination or otherwise as the master may direct.

And it is further ordered, adjudged and decreed that a perpetual injunction issue out of and under the seal of this court, strictly enjoining and restraining the defendants, The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, and

each of them, and each and every person connected directly or indirectly with them, and their associates, attorneys, solicitors, clerks, servants, agents, workmen and employés from directly or indirectly stamping, cutting, engraving, printing, moulding, or otherwise placing upon or attaching or securing to, any wrapper, or upon any package containing a digestive preparation, *of* using in connection with any such wrapper or package, or sending out or delivering or selling any package, label or wrapper, containing the word "Pancreopepsine" or the word "Pancro-Pepsin," or any other word similar to or only colorably differing from such words, or either of them, or any word or mark so contrived as to represent or to lead the public to believe it is the word "Pancreopepsine;" and are also enjoined from permitting or causing to be permitted, used or employed, any label containing the words "Pancreopepsine" or "Pancro-Pepsin," or any label or labels similar to or only colorably differing therefrom; and are also enjoined from advertising for sale in any manner any preparation containing or representing the words "Pancreopepsine" or "Pancro-Pepsin," or any colorable imitation thereof in any way whatsoever.

And it is further ordered, adjudged and decreed, that the complainant do recover of the defendants, and each of them, the costs of this suit.

Afterwards, to wit: on the 31st day of December, 1900, there was filed in the clerk's office of said court a certain petition for appeal in words and figures following to wit:

292 *Petition for Appeal. Filed Dec.* 31, 1900.

Petition for appeal.

In the United States Circuit Court, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER, Complainant, *vs.* THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, FRANK S. HERETH, O. T. EASTMAN, Defendants.	In Chancery.	No. 24787.

Appeal of the defendants.

The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, the defendants in the above-entitled cause, considering themselves aggrieved by the judgment and order entered herein on the 18th day of December, 1900, hereby appeal from said judgment and order, and the whole thereof, to the United States circuit court of appeals for the seventh circuit.

DYRENFORTH, DYRENFORTH & LEE,
Solicitors for Defendants.
P. C. DYRENFORTH, *Counsel for Defendants.*

Chicago, Ill., December 31, 1900.

(Endorsed:) Filed Dec. 31, 1900. S. W. Burnham, clerk.

And on the same day to wit: the 31st day of December, 1900, came the defendants in said entitled cause by the solicitors and file in the clerk's office of said court their assignment of errors in words and figures following to wit:

293 *Assignment of Errors. Filed Dec.* 31, 1900.

Assigment of errors.

In the United States Circuit Court, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER, Complainant, *vs.* THE SEARLE & HERETH COMPANY, GIDEON D. Searle, Frank S. Hereth, O. T. Eastman, Defendants.	In Chancery.	24787.

Assignment of errors on appeal to the United States circuit court of appeals for the seventh circuit.

Your orators, The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, defendants in the above-entitled action, respectfully submit that the honorable judge of said circuit court in deciding said cause and in granting the interlocutory decree of December 18th, 1900, therein, erred in the following particulars.

1. The court erred in holding that the name "Pancreopepsine" is a valid and legal trade-mark when applied to a digestive preparation.

2. The court erred in holding that the word "Pancreopepsine" is not descriptive of a digestive preparation, and hence can be a proper trade-mark.

3. The court erred in holding that the complainant is the sole and exclusive owner and proprietor of the trade-mark "Pancreopepsine."

4. The court erred in holding that the defendants in using the descriptive term "Pancro-Pepsin" to designate a digestive preparation of their manufacture, have violated and infringed upon the sole or any right of the complainant.

5. The court erred in holding that the descriptive word "Pancro-Pepsin" so nearly resembles the alleged trade-mark "Pancreopepsine," as to be calculated to deceive.

6. The court erred in holding that the complainant had any right to maintain its action in the State of Illinois for the alleged violation of its alleged trade-mark without proof that the complainant had complied with the laws of the State of Illinois, requiring that before such right of action shall be had the complainant shall register the trade-mark with the secretary of state of the State of Illinois.

294 7. The court erred in failing to hold that as the complainant has not registered the alleged trade-mark with the secretary of *the* state in the State of Illinois, it had no right of action against the defendants in said suit.

8. The court erred in holding that the complainant has any right to the trade-mark "Pancreopepsine" in the State of Illinois.

9. The court erred in holding that the use by the defendant in the State of Illinois, of the descriptive term "Pancro-Pepsin" on the labels or any other way designating the contents of receptacle containing the digestive preparation is in any sense unwarranted or a violation of any alleged rights of the complainant.

10. The court erred in refusing to dismiss the bill of complaint because the same does not allege and show that the complainant has been damaged in a sum in excess of two thousand dollars ($2,000.00) by the alleged action of the defendants.

11. The court erred in finding that the defendant by the use of the word "Pancro-Pepsin" as a descriptive designation on packages of a digestive preparation of its manufacture, engage in any unlawful competition with the complainant.

12. The court erred in failing to dismiss the bill of complaint because there is no showing whatsoever, that the defendants have ever employed the alleged infringing designation upon goods used in commerce with foreign nations or with Indian tribes.

13. The court erred in failing to hold that the alleged trade-mark of the complainant is not an arbitrary or fanciful term or symbol, such as the law recognizes as constituting a legitimate trade-mark, but is essentially descriptive, and hence, not a proper subject of trade-mark.

14. The court erred in failing to hold that the defendants' designation is accurately descriptive of the defendants' digestive preparation, and hence not a trade-mark.

15. The court erred in failing to hold that the defendants' designation "Pancro-Pepsin," as applied to the digestive preparation to which it is applied by the defendants, is a more correctly built descriptive word, and hence a more accurate designation of its preparation than the word "Pancreopepsine," as used by the complainant.

16. The court erred in failing to dismiss the bill of complaint by reason of the absence of any proof of unlawful competition with the complainant by the defendants.

17. The court erred in ordering a reference of the said cause to a master for the assessment of damages and the accounting of gains and profits in view of the fact that no basis of damages or profits existed inasmuch as unlawful competition is not shown.

295 18. The court erred in ordering that the defendants be enjoined and restrained from further using the descriptive term "Pancro-Pepsin" to designate a digestive preparation of their manufacture.

19. The court erred in ordering that the complainant do recover of the defendants, and each of them, the costs of this suit.

THE SEARLE & HERETH COMPANY,
GIDEON D. SEARLE,
FRANK S. HERETH,
O. T. EASTMAN,
By DYRENFORTH, DYRENFORTH & LEE,
Solicitors for Defendants.

P. C. DYRENFORTH,
Counsel for Defendants.

Chicago, Ill., December 31, 1900.

(Endorsed:) Filed Dec. 31, 1900. S. W. Burnham, clerk.

On the same day to wit: the 31st day of December, being one of the days of the regular December term of said court, 1900, in the record of proceedings thereof in said entitled cause before the Hon. Christian C. Kohlsaat, district judge, appears the following entry, to wit:

Order of Dec. 31, 1900, *Allowing Appeal.*

Order of December 31, 1900.

WILLIAM R. WARNER
vs.
THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, O. T. Eastman. } 24787.

Now come the defendants, by their solicitors and present to the court their petition for appeal to the United States circuit court of appeals for the seventh circuit, from the interlocutory decree entered herein, on the 18th day of December, 1900, and also have filed their assignment of errors.

It is thereupon ordered by the court that said appeal be allowed on the filing by the defendants of sufficient bond to a surety to be approved by the clerk of court in the penal sum of five hundred dollars ($500.00).

And on to wit: the 31st day of December, 1900, there was filed in the clerk's office of said court in said entitled cause a certain bond on appeal, in the words and figures following to wit:

296 *Appeal Bond. Filed Dec.* 31, 1900.

Appeal bond.

Know all men by these presents, that we The Searle & Hereth Company, a corporation, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, as principals and The United States Fidelity and Guaranty Company, as surety, are held and firmly bound unto

William R. Warner in the full and just sum of five hundred dollars ($500.00) to be paid to the said William R. Warner, his certain attorneys, executors, administrators or assigns; to which payment well and truly to be made, we bind ourselves our heirs, executors, and administrators, jointly and severally, by these presents.

Sealed with our seals and dated this — day of December in the year of our Lord nineteen hundred.

Whereas lately in the circuit court of the United States for the northern district of Illinois northern division, in a suit depending in said court between William R. Warner, complainant and The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, defendants, a decision was rendered against the said defendants and the said defendants having obtained leave to appeal and filed a copy thereof in the clerk's office of the said court to reverse the decision in the aforesaid suit, and a citation directed to the said William R. Warner citing and admonishing him to be and appear at a United States circuit court of appeals for the seventh circuit, to be holden at Chicago within — days from the date hereof.

Now, the condition of the above obligation is such, that if the said defendants shall prosecute said appeal to effect, and answer all damages and costs if they fail to make their plea good then the above obligation to be void; else to remain in full force and virtue.

THE SEARLE & HERETH CO.,
[SEAL.] Per G. D. SEARLE, *Pres't.*
G. D. SEARLE. [SEAL.]
FRANK S. HERETH. [SEAL.]
O. T. EASTMAN. [SEAL.]
[SEAL.] THE UNITED STATES FIDELITY AND GUARANTY COMPANY,
By GEORGE D. WEBB, *Attorney-in-fact.*

Approved Dec. 31, 1900.

KOHLSAAT, *J.*

(3½-ct. rev. stamp cancelled.)

(Endorsed:) Filed Dec. 31, 1900. S. W. Burnham, clerk.

297 And on to wit: the 31st day of December, 1900, there was filed in the clerk's office of said court a certain motion in words and figures following to wit:

Motion to Suspend Injunction. Filed Dec. 31, 1900.

Motion.

In the United States Circuit Court, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER, Complainant,
vs.
THE SEARLE & HERETH COMPANY, Gideon D. Searle, Frank S. Hereth, O. T. Eastman, Defendants. } In Chancery. No. 24787.

The defendants move the court for an order suspending the injunction heretofore issued in the above-entitled cause during the pendency of the appeal to the United States circuit court of appeals for the seventh circuit, from the decree of this court herein.

THE SEARLE & HERETH COMPANY,
GIDEON D. SEARLE,
FRANK S. HERETH,
O. T. EASTMAN,
By DYRENFORTH, DYRENFORTH & LEE,
Solicitors.

(Endorsed:) Filed Dec. 31, 1900. S. W. Burnham, clerk.

And on to wit: the 31st day of December, being one of the days of the regular December term of said court, 1900, in the record of proceedings thereof in said entitled cause before the Hon. Christian C. Kohlsaat, district judge, appears the following entry to wit:

298 *Order of Dec.* 31, 1900, *Suspending Injunction.*

Order of December 31, 1900.

WILLIAM R. WARNER
vs.
THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, O. T. Eastman. } 24787.

On motion of the defendants this day filed

It is ordered by the court that the injunction heretofore issued herein be suspended during the pendency of the appeal to the United States circuit court of appeals for the seventh circuit from the decree of this court heretofore entered herein, upon the defendants filing an indemnifying bond in the sum of five thousand dollars ($5000) with surety to be approved by the court.

It is thereupon considered and adjudged by the court that the bond this day presented by said defendants in the sum of five thou-

sand dollars ($5000) be and the same is hereby approved and ordered filed.

And on to wit: the 31st day of December, 1900, there was filed in the clerk's office of said court a certain indemnity bond in words and figures following to wit:

Indemnity Bond. Filed Dec. 31, 1900.

Indemnity bond.

In the Circuit Court of the United States, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER *vs.* THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, FRANK S. HERETH, and O. T. EASTMAN.	In Chancery.	24787.

Know all men by these presents: That we, The Searle & Hereth Company, a corporation, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, as principals, and the United States Fidelity and Guaranty Company, as surety, are held and firmly bound unto William R. Warner, in the penal sum of five thousand dol-
299 lars ($5000.00) lawful money of the United States of America, to be paid to said William R. Warner, for the payment of which well and truly to be made we and each of us bind ourselves, our heirs, successors, legal representatives and assigns by these presents.

Sealed with our seals and dated this 31st day of December, nineteen hundred.

The condition of the above obligation is such, that whereas, in the circuit court of the United States for the northern district of Illinois, northern division, on Thursday, the twenty-seventh day of December, A. D. 1900, an order was made by the judge of said court in the above-entitled cause, that upon the defendants giving bond in the penal sum of five thousand dollars ($5,000.00) the injunction heretofore issued against the defendants in said cause shall be suspended during the pendency of the appeal to the United States circuit court of appeals for the seventh circuit, from the decree of said circuit court.

Now, therefore, if the said principals shall well and truly pay or cause to be paid to said William R. Warner, any and all sums of money that shall be adjudged by the court to be due to said William R. Warner for damages which said William R. Warner may hereafter sustain by reason of said The Searle & Hereth Company continuing the sale of its digestive preparations with the name "Pancro-Pepsin" from the 31st day of December, A. D. 1900, until

the hearing and final determination of such appeal, then this obligation to be void, otherwise, to remain in full force and effect.

[SEAL.] THE SEARLE & HERETH CO.,
By G. D. SEARLE, *President.*
GIDEON D. SEARLE. [SEAL.]
FRANK S. HERETH. [SEAL.]
O. T. EASTMAN. [SEAL.]
[SEAL.] THE UNITED STATES FIDELITY AND GUARANTY COMPANY,
By GEORGE D. WEBB, *Attorney-in-fact.*

Approved Dec. 31, 1900.
KOHLSAAT, *J.*

(12½-cts. internal-R. stamp duly cancelled.)

(Endorsed:) Filed Dec. 31, 1900. S. W. Burnham, clerk.

And on to wit: the 4th day of January, 1901 there was filed in the clerk's office of said court a certain stipulation in regard to record in words and figures following to wit:

300 *Stipulation. Filed Jan.* 4, 1901.

Stipulation.

United States Circuit Court, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER, Complainant,
vs.
THE SEARLE & HER-TH COMPANY, GIDEON D. Searle, Frank S. Hereth, and O. T. Eastman, Defendants. } In Chancery. 24787.

It is hereby stipulated and agreed that the clerk in preparing the transcript of record herein, may use a copy of the printed record as part of the transcript, omitting the placita, and the several headings to the different parts of such record, and we hereby waive all errors that may appear in such printed record without prejudice to the rights of either party to have any corrections made that may appear to be material or necessary.

BROWN & DARBY, *Complainant's Solicitors.*
DYRENFORTH, DYRENFORTH & LEE,
Defendants' Solicitors.

(Endorsed:) Filed Jan. 4, 1901. S. W. Burnham, clerk.

301 *Præcipe for Transcript. Filed Jan. 4, 1901.*

United States Circuit Court, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman. } No. 24787.

To the clerk of said court:

You will please prepare a transcript of the record in this cause, to be filed in the office of the clerk of the United States circuit court of appeals for the seventh circuit, under the appeal heretofore perfected to said court, and include in said transcript in addition to the printed copy of the record, the following papers and proceedings on file, to wit:

Stipulation for use of printed record.
Amendment to bill of complaint.
Order for leave to file affidavits of William R. Warner, William R. Warner, Jr., and Andrew Remick; and to amend bill of complaint.
Affidavits of William R. Warner, William R. Warner, Jr., and Andrew Remick.
Interlocutory decree.
Petition for appeal.
Assignment of errors.
Order allowing appeal.
Bond on appeal.
Motion to suspend injunction.
Order to suspend injunction.
Indemnity bond.

Said transcript to be prepared as required by law and the rules of this court, and the rules of the United States circuit court of appeals for the seventh circuit, and filed in the office of the clerk of the said United States circuit court of appeals at Chicago.

DYRENFORTH, DYRENFORTH & LEE,
Solicitors for Defendants and Appellants.

Chicago, Ill., January 4, 1901.

(Endorsed:) Filed Jan. 4, 1901. S. W. Burnham, clerk.

302 *Clerk's Certificate.*

NORTHERN DISTRICT OF ILLINOIS, *Northern Division,* } *ss:*

I, S. W. Burnham, clerk of the circuit court of the United States for said northern district of Illinois, do hereby certify the above and foregoing to be a true and complete transcript of proceedings had

of record in said court (made in accordance with præcipe filed herein) in the cause entitled William R. Warner, complainant, *vs.* The Searle and Hereth Company, Gideon D. Searle, Frank S. Hereth, O. T. Eastman, defendants, as the same appear from the original records and files of said court now remaining in my custody and control.

In testimony whereof I have hereunto set my hand and affixed the seal of said court at my office in the city of Chicago, in said district, this 28th day of January, 1901.

[SEAL.] S. W. BURNHAM, *Clerk.*

Citation.

UNITED STATES OF AMERICA, *ss:*

The President of the United States to William R. Warner, Greeting:

You are hereby cited and admonished to be and appear at a United States circuit court of appeals, for the seventh circuit, to be holden at Chicago within thirty days from the date hereof, pursuant to an appeal filed in the clerk's office of the circuit court of the United States for the northern district of Illinois, northern division, wherein The Searle and Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman are appellants and you are appellee, to show cause, if any there be, why the decree rendered against the said appellants should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Christian C. Kohlsaat, judge of the district court of the United States, this 31st day of December, in the year of our Lord one thousand nine hundred and one.

KOHLSAAT, *Judge.*

Service accepted.

WILLIAM R. WARNER,
By BROWN & DARBY, *Solicitors.*

(Endorsed:) Filed January 28, 1901. S. W. Burnham, clerk.

303 At a regular term of the United States circuit court of appeals for the seventh circuit, begun and held at the United States court-rooms, in the city of Chicago, in said seventh circuit, on the second day of October, 1900, of the October term, in the year of our Lord one thousand nine hundred and one and of our Independence the one hundred and twenty-fifth year.

And afterwards, to wit: on the thirty-first day of January, 1901, in the October term last aforesaid, came the appellee by his counsel Mr. Frank T. Brown and Mr. Samuel E. Darby, and filed in the office of the clerk of this court his appearance, said appearance being in the words and figures following, to wit:

United States Circuit Court of Appeals for the Seventh Circuit, October Term, 1900.

THE SEARLE AND HERETH COMPANY ET AL., Appellants,
vs.
WILLIAM R. WARNER, Appellee. } No. 766.

The clerk will enter *my* appearance as counsel for the appellee.

FRANK T. BROWN.
SAMUEL E. DARBY.

Endorsed: Filed Jan. 31, 1901. Edward M. Holloway, clerk.

And afterwards, to wit: on the seventh day of February, 1901, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

304 THURSDAY, *February* 7, 1901.

Court met pursuant to adjournment.

Present: Hon. William A. Woods, circuit judge, presiding; Hon. James G. Jenkins, circuit judge; Hon. Peter S. Grosscup, circuit judge; Hon. Romanzo Bunn, district judge.

Before Hon. William A. Woods, presiding judge.

THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman
vs.
WILLIAM R. WARNER. } 766.

Appeal to the circuit court of the United States for the northern district of Illinois, northern division.

Upon application of counsel for appellant-, it is ordered that the printed records used on the trial of this cause in the circuit court of the United States for the northern district of Illinois, northern division, may be used by the clerk of this court in making up the printed record, if the same conform or are made to conform with the rules of this court.

And afterwards, to wit: on the ninth day of February, 1901, in the October term last aforesaid, came the appellants, by their counsel Mr. Philip C. Dyrenforth, and filed in the office of the clerk of this court *his* appearance, said appearance being in the words and figures following to wit:

305 United States Circuit Court of Appeals for the Seventh Circuit, October Term, 1900.

THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman, Appellants, *vs.* WILLIAM R. WARNER, Appellee. } No. 766.

The clerk will enter my appearance as counsel for the appellants.

PHILIP C. DYRENFORTH.

Endorsed: Filed Feb. 9, 1901. Edward M. Holloway, clerk.

And afterwards, to wit: on the twenty-fourth day of September, 1901, in the October term last aforesaid, there was filed in the office of the clerk of this court a certain stipulation, said stipulation being in the words and figures following, to wit:

In the United States Circuit Court of Appeals, Seventh Circuit.

THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman, Appellants, *v.* WILLIAM R. WARNER, Appellee. } No. 766.

Now come the appellants by their solicitor, Philip C. Dyrenforth, and William Richard Warner, Jr., executor, by his solicitors, Frank T. Brown and Samuel E. Darby, and stipulate and agree that the said William Richard Warner, Jr., has been duly appointed executor, by the registered will, for the city and county of Phil-
306 adelphia, in the Commonwealth of Pennsylvania, of the estate of the appellee, William R. Warner, which appellee is now deceased, and which estate includes the trade-mark embraced in the above-entitled suit and all rights thereunder; and further stipulate and agree that the said William Richard Warner, Jr., as executor and individually may be made a party to the proceeding as appellee in place of the said William R. Warner, deceased, and that this stipulation may take the place of the usual proof to a similar effect; and the honorable court is requested to make an order that the said William Richard Warner, Jr., individually and as executor of William R. Warner, deceased, may be made a party to this proceeding as appellee in place of the said William R. Warner, deceased.

PHILIP C. DYRENFORTH,
Attorney for Appellants.

FRANK T. BROWN,
SAMUEL E. DARBY,
Attorneys for Appellee and for William Richard Warner.

Chicago, Sept. 24, 1901.

Endorsed: Filed Sep. 24, 1901. Edward M. Holloway, clerk.

At a regular term of the United States circuit court of appeals for the seventh circuit, begun and held at the United States court-rooms, in the city of Chicago, in said seventh circuit, on the first day of October, 1901, of the October term in the year of our Lord one thousand nine hundred and one and of our Independence the one hundred and twenty-sixth.

307 And afterwards, to wit: on the first day of October, 1901, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

TUESDAY, *October* 1, 1901.

Present: Hon. James G. Jenkins, circuit judge presiding; Hon. Peter S. Grosscup, circuit judge; Hon. William H. Seaman, district judge.

Order.

It is ordered by the court that William H. Seaman, judge of the district court of the United States for the eastern district of Wisconsin, be designated and assigned to sit in this court as a member thereof during the present session. Thereupon said Seaman appeared and took his seat as a member of said court.

THE SEARLE AND HERETH COMPANY ET AL.
vs.
WILLIAM R. WARNER. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

It is ordered by the court that this cause be and the same is hereby set down for hearing November 14, 1901.

And afterwards, to wit: on the second day of October, 1901, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

308 WEDNESDAY, *October* 2, 1901.

Court met pursuant to adjournment.

Present: Hon. James G. Jenkins, circuit judge presiding; Hon. Peter S. Grosscup, circuit judge; Hon. William H. Seaman, district judge.

THE SEARLE AND HERETH COMPANY ET AL.
vs.
WILLIAM R. WARNER. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Upon motion of Mr. P. C. Dyrenforth, counsel for appellants, Mr. Frank T. Brown, counsel for appellee, present and consenting

thereto, and upon the filing of stipulation of counsel, it is ordered that William Richard Warner, Jr., individually and as executor of the estate of William R. Warner, deceased, be made a party in this cause as appellee in place of William R. Warner, deceased.

And afterwards, to wit: on the same day, to wit: on the second day of October, 1901, in the October term last aforesaid, there was filed in the office of the clerk of this court certified copy of letters testamentary in the estate of William R. Warner deceased, which letters testamentary are in the words and figures following to wit:

309 COMMONWEALTH OF PENNSYLVANIA, } ss:
City and County of Philadelphia, }

By the tenor of these presents, I, Jacob Singer, register for the probate of wills and granting letters of administration, in [SEAL.] and for the city and county of Philadelphia, in the Commonwealth of Pennsylvania.

Do make known to all men that on the sixth day of April, A. D. 1901, at Philadelphia, before me, was proved and approved the last will and testament of William R. Warner, deceased, (a true copy whereof is to these presents annexed), having, whilst he lived and at the time of his death, divers goods, chattels, rights and credits within the said Commonwealth; by reasons whereof the approbation and insinuation of said last will and testament, and the committing administration of all and singular the goods, chattels, rights and credits which were of the said deceased; and also the auditing the accounts, calculations and reckonings of the said administration and absolute care of the same, to me are manifestly known to belong; and that administration of all and singular the goods, chattels, rights and credits of said deceased any way concerning his last will and testament, is committed to William R. Warner, Jr., executor in the said testament named; he having first been duly sworn well and truly to administer the goods, chattels, right and credits of the deceased and make a true and perfect inventory thereof and exhibit the same into the register's office of Philadelphia, on or before the 6th day of May next, and to render a just and true account, calculation and reckoning of the said
310 administration, on or before the sixth day of April, one thousand nine hundred and two (1902) or when lawfully required; and also to diligently and faithfully regard and well and truly comply with the provisions of the act relating to collateral inheritance.

In testimony whereof, I have hereunto set my hand and seal of office, at Philadelphia, this 6th day of April in the year of our Lord one thousand nine hundred and one.

The said testator died on the 3rd day of April, 1901, at 9 o'clock, a. m., as per affidavit filed.

CHAS. IRWIN,
Deputy Register.

Fees.

Letters testamentary	$22.50
Filing renunciation	
Certificate 10	5.00
Documentary stamps	1.00
Paid	$31.50

(Form No. 12 R. W.)

COMMONWEALTH OF PENNSYLVANIA, } ss:
City and County of Philadelphia, }

REGISTER'S OFFICE, *May 20th*, 1901.

I, Jacob Singer, register of wills and *ex officio* clerk of the orphans' court for the city and county of Philadelphia, in the Commonwealth of Pennsylvania, do hereby certify the foregoing to be a full and complete copy of the letters testamentary in the estate of William R. Warner, deceased; granted unto William R. Warner, Jr. on the 6th day of April, A. D. 1901, as the same remains on
311 file and of record in this office.

(10-cents documentary stamp.)

In testimony whereof, I have hereunto set my hand and official seal at Philadelphia the date above.

[SEAL.]

JACOB SINGER,
Register of Wills and ex Officio Clerk of the Orphans' Court.

STATE OF PENNSYLVANIA, } ss:
Philadelphia County, }

I, William B. Hanna, presiding judge of the orphans' court, of Philadelphia county, do certify that the foregoing certificate and attestation, made by Jacob Singer, Esq., register of wills and *ex officio* clerk of said orphans' court, whose name is thereto subscribed and seal of his office affixed, are in due form and made by the proper officer.

In testimony whereof, I have hereunto set my hand this 20th day of May, in the year of our Lord one thousand nine hundred and one (1901).

WM. B. HANNA,
Presiding Judge.

(Ten-cent stamp.)

STATE OF PENNSYLVANIA, } ss:
Philadelphia County, }

I, Jacob Singer, Esq., register of wills and *ex officio* clerk of the orphans' court of Philadelphia county, do certify that the Honorable William B. Hanna, by whom the foregoing attestation was made, and who has hereunto subscribed his name, was, at the time of

making thereof, and still is, presiding judge of the orphans' court
312 of Philadelphia county, duly commissioned and sworn, to all whose acts, as such, full faith and credit, are and ought to be given, as well in courts of judication as elsewhere.

In testimony whereof, I have hereunto set my hand and affixed the seal of the said court, this 20th day of May, in the year of our Lord one thousand nine hundred and one (1901).

(Ten-cent stamp.)

[SEAL.]

JACOB SINGER,
Register of Wills and ex Officio Clerk of the Orphans' Court.

Endorsed: Filed Oct. 2, 1901. Edward M. Holloway, clerk.

And afterwards, to wit: on the same day, to wit: on the second day of October, 1901, in the October term last aforesaid, there was filed in the office of the clerk of this court a certain appointment of attorney, said appointment of attorney being in the words and figures following, to wit:

In the United States Circuit Court of Appeals for the Seventh Circuit.

THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman
vs.
WILLIAM R. WARNER, JR.
} No. 766.

And now comes William R. Warner, Jr., executor of the estate of William R. Warner, the appellee in the above-entitled suit and who is now deceased, and appoints Frank T. Brown and Samuel E. Darby, composing the copartnership firm of Brown & Darby (whose offices are located at No. 1124 Monadnock block, Chicago) as
313 his true and lawful attorneys, to appear and act for him in said appeal and in all further proceedings in said cause.

WILLIAM R. WARNER, JR.,
Executor Estate of William R. Warner, Deceased.

25-cent stamp.

Endorsed: Filed Oct. 2, 1901. Edward M. Holloway, clerk.

And afterwards, to wit: on the fifth day of October, 1901, in the October term last aforesaid, there was filed in the office of the clerk of this court a certified copy of the opinion of Kohlsaat, district judge, which opinion is in the words and figures following, to wit:

In the United States Circuit Court, Northern District of Illinois, Northern Division.

WILLIAM R. WARNER
vs.
THE SEARLE & HERETH COMPANY ET AL. } No. 24787.

KOHLSAAT, *District Judge:*

This is a suit for the alleged infringement of complainant's trade-mark "Pancreopepsine," and for alleged unfair competition. Defendants use the designation "Pancro-Pepsin" for their preparation, which is similar in character to that of complainant placed upon the market under the name "Pancreopepsin."

I am of the opinion, from the evidence in this record, that the word "Pancreopepsin" is not intrinsically descriptive, and
314 that it has through the particular use to which it has been applied by complainant, acquired a secondary meaning as a designation for complainant's preparation.

Complainant's trade-mark will therefore be held valid and a decree may be prepared accordingly.

Aside from the similarity of the term "Pancro-Pepsin" to complainant's trade-mark, I am of the opinion that complainant's contention touching unfair competition is not established.

Endorsed: Filed Dec. 14, 1900. S. W. Burnham, clerk.

NORTHERN DISTRICT OF ILLINOIS, } ss:
Northern Division, }

I, S. W. Burnham, clerk of the circuit court of the United States for said northern district of Illinois, do hereby certify the above and foregoing to be a true copy of an opinion filed in said court on the 14th day of December, A. D. 1900, in the cause wherein William R. Warner is the complainant and The Searle & Hereth Company *et al.*, are the defendants, as the same appears from the original now remaining in my custody and control.

In testimony whereof I have hereunto set my hand and
[SEAL.] affixed the seal of said court at my office in Chicago, in said district, this 3rd — A. D., 1901.

S. W. BURNHAM, *Clerk.*

Endorsed: Filed Oct. 5, 1901. Edward M. Holloway, clerk.

315 And afterwards, to wit, on the ninth day of November, 1901, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

SATURDAY, *November* 9, 1901.

Court met pursuant to adjournment.

Present: Hon. James G. Jenkins, circuit judge presiding; Hon. Peter S. Grosscup, circuit judge; Hon. William H. Seaman, district judge.

Order.

It is ordered by the court that J. Otis Humphrey, judge of the district court of the United States for the southern district of Illinois, be designated and assigned to sit in this court as a member thereof during the present session.

And afterwards, to wit, on the fourteenth day of November, 1901, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

THURSDAY, *November* 14, 1901.

Court met pursuant to adjournment.
Present: Hon. James G. Jenkins, circuit judge, presiding; Hon. Peter S. Grosscup, circuit judge; Hon. J. Otis Humphrey, district judge.

316 THE SEARLE AND HERETH COMPANY ET AL. *vs.* WILLIAM R. WARREN, JR., Executor, etc. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Now this day come the parties by their counsel and this cause now comes on to be heard on the printed record and briefs of counsel, and on oral argument by Mr. Philip C. Dyrenforth and Mr. Robert H. Parkinson, counsel for appellants, and by Mr. Frank T. Brown, counsel for appellee, and the court having heard the same takes this matter under advisement.

And afterwards, to wit: on the fifteenth day of November, 1901, in the October term last aforesaid, there was filed in the office of the clerk of this court a certain stipulation of counsel in the above-entitled cause, said stipulation being in the words and figures following, to wit:

In the United States Circuit Court of Appeals for the Seventh Circuit, October Term, A. D. 1900.

THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman, Appellants, *vs.* WILLIAM R. WARNER, Appellee. } No. 766.

317 *Stipulation.*

The bill of complaint herein having been intended to allege that the complainant William R. Warner, was a citizen as well as an inhabitant of the State of Pennsylvania and that the defendants were each of them citizens as well as inhabitants of the State of

Illinois, and it being known to and admitted by all parties that said Warner was at the time of commencing suit and at the time of hearing below and until his death pending appeal a citizen of Pennsylvania and that the present complainant, substituted for him during the pendency of the appeal, is also a citizen of Pennsylvania as well as an inhabitant of such State, and that each of the defendants is a citizen as well as an inhabitant of the State of Illinois, these facts are admitted by both parties.

And it is further agreed that the bill of complaint may be and hereby is amended *nunc pro tunc* as of the date of filing the same by inserting therein the allegation that the several parties are citizens as aforesaid, and that this shall have the same effect in all respects as if the allegation had been made in the bill of complaint and admitted by the answer or supported by proper proof in evidence.

And the court of appeals is respectfully requested by counsel for each of the parties to permit this stipulation to be entered as a part of the record in the cause and to be given the effect herein provided.

FRANK T. BROWN,
SAMUEL E. DARBY,
Counsel for Appellant.
P. C. DYRENFORTH,
Counsel for Appellee.

Endorsed: Filed Nov. 15, 1901. Edward M. Holloway, clerk.

318 And afterwards, to wit: on the twenty-first day of January, 1902, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

TUESDAY, *January* 21, 1902.

Court met pursuant to adjournment.

Before Hon. James G. Jenkins, circuit judge; Hon. Peter S. Grosscup, circuit judge.

THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman,
vs.
WILLIAM RICHARD WARNER, JR., and WILLIAM RICHARD Warner, Jr., as Executor of the Estate of William R. Warner, Deceased. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Now again this cause comes on to be considered on the opinion of the judges before whom it was heard, which opinion is as follows:

319 In the United States Circuit Court of Appeals for the Seventh Circuit, January Session, A. D. 1902.

THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman, Appellants,
vs.
WILLIAM R. WARNER, Appellee. } No. 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

The appeal in this case is from an interlocutory decree entered December 18, 1900, finding the appellee to be the sole and exclusive owner and proprietor of the trade-mark, "Pancreopepsine;" that such a name is a good, valid and legal trade-mark when applied to a digestive preparation, as appellee has applied it; that appellants in the use of a similar digestive preparation, designated "Pancro-Pepsin," infringed appellee's exclusive rights to such trade-mark; and enjoining appellants, their associates, attorneys, clerks, servants, agents, workmen and employees from directly or indirectly stamping, cutting engraving, printing, molding or otherwise placing upon or attaching to any wrapper, or upon any package containing a digestive preparation; or from using in connection with such wrapper or package or sending out or selling any such package, label or wrapper, the word "Pancro-Pepsin," or any other word similar to, or only colorably different from, such words.

The further facts are stated in the opinion of the court.

320 Before Jenkins and Grosscup, circuit judges, and Baker, district judge.

GROSSCUP, circuit judge, delivered the opinion of the court.

The circuit court found that, aside from the similarity of the term "Pancro-Pepsin" to appellee's alleged trade-mark, "Pancreopepsine," there was no proof establishing unfair competition.

The record sustains this finding. Appellants' and appellee's labels, bottles and packages are dissimilar except in the single instance of the two words indicated. Laying aside the use of these similar words, there would be no room for complaint that appellants were attempting in any unfair way to invade the trade built up by the merit of appellee's goods, or by his advertising. The case turns, therefore, in its aspect both as a trade-mark case and as a case of alleged unfair competition, upon the right of the appellee to a monopoly of the word "Pancreopepsine," or any word bearing a similar appearance or sound.

It is well-established law that there can be no trade-mark in the use of words, unless such words indicate ownership and origin, and are not merely descriptive of other attributes, such as quality, texture, composition, etc. It may well happen, however, that a word launched originally upon the buying world as one indicating ownership and origin, may, in time, come to be descriptive also of the class of goods to which it has been attached. In such case it is said to

have acquired a secondary meaning, and is not, on that account, alone, to be held to have been originally descriptive. The circuit court seems to have been under the impression that such was the status of the word "Pancreopepsine" in 1876, the date of its adoption by the appellee.

But pancreatin, an extract derived from the pancreas, useful as a digestive ferment, either when administered by the physician or when acting in the secretion of the pancreas of the individual, has been known to the scientific world for more than half a century. Pepsin, another useful artificial aid to digestion, has been known for an almost equal length of time. The former is said to have been discovered by the French chemists, Bourchardat and Sandras, who not only correctly described it, but noted that it possessed digestive properties in certain directions. A paper published by Kinkead in the London Lancet in 1870, and republished in the American Journal of Pharmacy in 1871, deals with these two digestive agents; pointing out that the one is chiefly used as an auxiliary to the functions of the stomach, while the other aids the natural digestive functions of the intestines. Articles to the same purpose were printed in the United States Dispensatory of the year 1872, and in
321 subsequent issues of the American Journal of Pharmacy. These, and other matter contained in the record before us, prove that prior to 1876 pancreatin and pepsin, as aids to digestion, were under extensive investigation and exploitation by the medical fraternities of both Europe and America.

The appellee discovered neither pancreatin nor pepsin. He may have been the first to utilize the phraseology applied to these discoveries in the name given to his digestive remedy; but such phraseology, although then comparatively unknown to the general public, was already descriptive within that circle who were reading, and, probably, already acting upon, the investigations of the medical scientists. We think it clear that no one is entitled to seize upon words or phrases well known to investigators and their readers, though still unknown to the public at large, and make use of such words as a trade-mark to the exclusion of others who may come after. The flowering into popular language of the more or less restricted nomenclature of a useful medical advance cannot be thus imprisoned or cut off by the far-sighted bidder for popular favor.

The specific word "Pancreopepsine" is, in a sense, artificial. It was doubtless coined to some extent by the ingenuity of the appellee, and we do not now rule—for the question is not before us—that it may not in a proper case, be made the basis for an injunction against unfair competition, within the rule declared in *Elgin National Watch Company v. Illinois Watch Co.*, 179 U. S. 165. What we do rule, in the presence of the record before us, is that appellee cannot under such right appropriate all similar words, simple or compound, that grow out of the medical nomenclature relating to pancreatin and pepsin then in existence; and that such right of appropriation does not extend, at any rate, to the word "Pancro-Pepsin."

No citation would seem to be needed to sustain us in this ruling, but similar decisions are embodied in the Ferro-Phosphorated Elixir

Case, 58 N. Y. 223. *Rumford Chemical Works vs. Muth*, 35 Fed. Rep. 524. See also *Hostetter vs. Fries*, 17 Fed. Rep. 620. *Lawrence Mfg. Co. vs. Tennessee Mfg. Co.*, 138 U. S. 537. *Coates vs. Merrick Thread Co.*, 149 U. S. 652. *Leclanche Battery Co. vs. Western Electric Co.*, 23 Fed. Rep. 276, and American Trade-mark Cases, page 265.

The decree of the circuit court must be reversed and remanded, with instructions to the circuit court to dissolve the injunction.

322 On consideration whereof, it is now ordered, adjudged, and decreed by this court that the decree of the circuit court in this cause be, and the same is hereby reversed with costs; and that this cause be, and the same is hereby remanded to the circuit court with instructions to dissolve the injunction.

And afterwards, to wit, on the thirty-first day of January 1902, in the October term last aforesaid, came the appellants by their counsel, Mr. Philip C. Dyrenforth, and filed in the office of the clerk of this court a notice of motion to amend decree, which notice is in the words and figures following, to wit:

In the United States Circuit Court of Appeals for the Seventh Judicial Circuit.

SEARLE & HERETH COMPANY ET AL. *vs.* WILLIAM R. WARNER. } In Equity. No. 766.

To Messrs. Frank T. Brown and Samuel E. Darby, counsel for appellee:

Please take notice that on Tuesday, February 4, 1902, at the opening of the circuit court of appeals for the seventh circuit, or as soon thereafter as counsel can be heard, I shall appear before said court and present the motion a copy of which is herewith furnished you, to have the order at the close of the opinion announced in said cause on the 21st day of January, 1902, so amended as to direct the dismissal of the bill of complaint; and at said time and place

323 you can appear and resist said motion if you see fit.

Very respectfully,

PHILIP C. DYRENFORTH,
Counsel for Appellants.

Endorsed: Filed Jan. 31, 1902. Edward M. Holloway, clerk.

And afterwards, on the same day, to wit: on the thirty-first day of January, 1902, in the October term last aforesaid, came the appellants by their counsel, Mr. Philip C. Dyrenforth, and filed in the office of the clerk of this court a motion to amend decree, said motion being in the words and figures following, to wit:

In the United States Circuit Court of Appeals for the Seventh Judicial Circuit.

SEARLE & HERETH COMPANY ET AL.
vs.
WILLIAM R. WARNER. } In Equity. No. 766.

Motion is hereby made in behalf of the appellants that the order at the close of the opinion announced by this court in the above-entitled cause on the 21st day of January, 1902, be so amended as to direct the dismissal of the bill of complaint.

PHILIP C. DYRENFORTH,
Counsel for Appellants.

Endorsed: Filed Jan. 31, 1902. Edward M. Holloway, clerk.

324 And afterwards, to wit: on the fourth day of February, 1902, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

TUESDAY, *February* 4, 1902.

Court met pursuant to adjournment.
Present: Hon. James G. Jenkins, circuit judge, presiding; Hon. Peter S. Grosscup, circuit judge; Hon. Francis E. Baker, circuit judge.

SEARLE & HERETH COMPANY ET AL.
vs.
WILLIAM R. WARNER, JR., and WILLIAM R. WARNER, JR., as Executor, etc. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Now this day come the parties by their counsel and the motion to amend the decree entered in this cause in this court on the twenty-first day of January, 1902, so as to direct the dismissal of the bill of complaint, now comes on to be heard. And the same having been submitted by Mr. P. C. Dyrenforth, counsel for appellants, the court takes this matter under advisement.

And afterwards, to wit: on the fifth day of February, 1902, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

WEDNESDAY, *February* 5, 1902.

Court met pursuant to adjournment.
325 Present: Hon. James G. Jenkins, circuit judge; Hon. Peter S. Grosscup, circuit judge; Hon. Francis E. Baker, circuit judge.

THE SEARLE AND HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman
vs.
WILLIAM RICHARD WARNER, JR., and WILLIAM RICHARD Warner, Jr., as Executor of the Estate of William R. Warner, Deceased. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Now again this cause comes on to be considered on the motion to amend the decree entered in this cause in this court on the 21st day of January, 1902, and on consideration whereof it is now ordered that the said decree be, and the same is hereby amended to read as follows:

Now again this cause comes on to be considered on the opinion of the judges, before whom it was heard, which opinion is as follows:

326 In the United States Circuit Court of Appeals for the Seventh Circuit, January Session, A. D. 1902.

THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, Frank S. Hereth, and O. T. Eastman, Appellants,
vs.
WILLIAM R. WARNER, Appellee. } No. 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

The appeal in this case is from an interlocutory decree entered December 18, 1900, finding the appellee to be the sole and exclusive owner and proprietor of the trade-mark, "Pancreopepsine;" that such a name is a good, valid and legal trade-mark when applied to a digestive preparation, as appellee has applied it; that appellants in the use of a similar digestive preparation, designated "Pancro-Pepsin," infringed appellee's exclusive rights to such trade-mark; and enjoining appellants, their associates, attorneys, clerks, servants, agents, workmen and employees from directly or indirectly stamping, cutting, engraving, printing, molding or otherwise placing upon or attaching to any wrapper, or upon any package containing a digestive preparation; or from using in connection with such wrapper or package or sending out or selling any such package, label or wrapper, the word "Pancro-Pepsin," or any other word similar to, or only colorably different from, such words.

The further facts are stated in the opinion of the court.

327 Before Jenkins and Grosscup, circuit judges, and Baker, district judge.

GROSSCUP, circuit judge, delivered the opinion of the court.

The circuit court found that, aside from the similarity of the term "Pancro-Pepsin" to appellee's alleged trade-mark, "Pancreopepsine," there was no proof establishing unfair competition.

The record sustains this finding. Appellants' and appellee's labels, bottles and packages are dissimilar except in the single instance of the two words indicated. Laying aside the use of these similar words, there would be no room for complaint that appellants were attempting in any unfair way to invade the trade built up by the merit of appellee's goods, or by his advertising. The case turns, therefore, in its aspect both as a trade-mark case and as a case of alleged unfair competition, upon the right of the appellee to a monopoly of the word "Pancreopepsine," or any word bearing a similar appearance or sound.

It is well-established law that there can be no trade-mark in the use of words, unless such words indicate ownership and origin, and are not merely descriptive of other attributes, such as quality, texture, composition, etc. It may well happen, however, that a word, launched originally upon the buying world as one indicating ownership and origin, may, in time, come to be descriptive also of the class of goods to which it has been attached. In such case, it is said to have acquired a secondary meaning, and is not, on that account, alone, to be held to have been originally descriptive. The circuit court seems to have been under the impression that such was the status of the word "Pancreopepsine" in 1876, the date of its adoption by the appellee.

But pancreatin, an extract derived from the pancreas, useful as a digestive ferment, either when administered by the physician or when acting in the secretion of the pancreas of the individual, has been known to the scientific world for more than half a century. Pepsin, another useful artificial aid to digestion, has been known for an almost equal length of time. The former is said to have been discovered by the French chemists, Bourchardat and Sandras, who not only correctly described it, but noted that it possessed digestive properties in certain directions. A paper published by Kinkead in the London Lancet in 1870, and republished in the American Journal of Pharmacy in 1871, deals with these two digestive agents; pointing out that the one is chiefly useful as an auxiliary to the functions of the stomach, while the other aids the natural digestive functions of the intestines. Articles to the same purpose were printed in the United States Dispensatory of the year 1872, and in
328 subsequent issues of the American Journal of Pharmacy.

These, and other matter contained in the record before us, prove that prior to 1876 pancreatin and pepsin, as aids to digestion, were under extensive investigation and exploitation by the medical fraternities of both Europe and America.

The appellee discovered neither pancreatin nor pepsin. He may have been the first to utilize the phraseology applied to these discoveries in the name given to his digestive remedy; but such phraseology, although then comparatively unknown to the general public, was already descriptive within that circle who were reading, and, probably, already acting upon, the investigations of the medical scientists. We think it clear that no one is entitled to seize upon words or phrases well known to investigators and their readers, though still unknown to the public at large, and make use of such

words as a trade-mark to the exclusion of others who may come after. The flowering into popular language of the more or less restricted nomenclature of a useful medical advance cannot be thus imprisoned or cut off by the far-sighted bidder for popular favor.

The specific word "Pancreopepsine" is, in a sense, artificial. It was doubtless coined to some extent by the ingenuity of the appellee, and we do not now rule—for the question is not before us—that it may not in a proper case, be made the basis for an injunction against unfair competition, within the rule declared in *Elgin National Watch Company v. Illinois Watch Co.*, 179 U. S. 165. What we do rule, in the presence of the record before us, is that appellee cannot under such right appropriate all similar words, simple or compound, that grow out of the medical nomenclature relating to pancreatin and pepsin then in existence; and that such right of appropriation does not extend, at any rate, to the word "Pancro-Pepsin."

No citation would seem to be needed to sustain us in this ruling, but similar decisions are embodied in the Ferro-Phosphorated Elixir Case, 58 N. Y. 223. *Rumford Chemical Works vs. Muth*, 35 Fed. Rep. 524. Also see *Hostetter vs. Fries*, 17 Fed. Rep. 620. *Lawrence Mfg. Co. vs. Tennessee Mfg. Co.*, 138 U. S. 537. *Coates vs. Merrick Thread Co.*, 149 U. S. 562. *Leclanche Battery Co. vs. Western Electric Co.*, 23 Fed. Rep. 276, and American Trade-mark Cases, page 265.

The decree of the circuit court must be reversed and remanded, with instructions to the circuit court to dissolve the injunction.

329 On consideration whereof, it is now ordered, adjudged and decreed by this court, that the decree of the circuit court in this cause be, and the same is hereby reversed with costs; and that this cause be, and the same is hereby remanded to the said circuit court, with instructions to dissolve the injunction and dismiss the bill of complaint.

And afterwards, to wit: on the twentieth day of February, 1902, in the October term last aforesaid, came the appellee, by his counsel Mr. Frank T. Brown and Mr. Samuel E. Darby, and filed in the office of the clerk of this court a certain motion for stay of mandate, said motion being in the words and figures following, to wit:

In the United States Circuit Court of Appeals for the Seventh Circuit, January Term, 1902.

THE SEARLE & HERETH COMPANY, GIDEON D. Searle, Frank S. Hereth, and O. T. Eastman, Appellants, *vs.* WILLIAM R. WARNER, JR., Appellee. | In Chancery. No. 766.

Motion to Stay Issuance of Mandate Pending Appeal.

And now comes William R. Warner, Jr., appellee in the above-entitled cause, by his solicitors, and moves the court for an order staying the issuance of the mandate during the pendency of the

appeal to the United States Supreme Court from the decree of this court herein.

330 It is also moved that the hearing on this motion and on the petition for appeal and the filing of the assignment of errors on appeal to the Supreme Court of the United States, be postponed agreeably to the convenience of the court and of counsel.

WILLIAM R. WARNER, JR.,
By FRANK T. BROWN,
SAMUEL E. DARBY, *Solicitors.*

In the United States Circuit Court of Appeals for the Seventh Circuit, January Term, 1902.

THE SEARLE & HERETH COMPANY, GIDEON D. Searle, Frank S. Hereth, and O. T. Eastman, Appellants,
vs.
WILLIAM R. WARNER, JR., Appellee.
} In Chancery. No. 766.

Notice.

GENTLEMEN: Please take notice that on Thursday, February 20, 1902, at 10 o'clock in the morning, or as soon thereafter as counsel can be heard, a motion will be presented to the honorable judges of the United States circuit court of appeals for the seventh circuit, in the above-entitled cause, for an order staying the issuance of the mandate in said cause during the pendency of an appeal to
331 the Supreme Court of the United States and at the same time a petition for appeal to the Supreme Court of the United States will also be presented, and the court will be asked to grant a delay for the filing of the assignment of errors on appeal, and also for the argument of said motion and petition, agreeable to the convenience of court and of counsel.

Copies of said motion and petition accompany this notice.

Very respectfully,

FRANK T. BROWN,
SAMUEL E. DARBY,
Solicitors for Appellee.

To Messrs. Dyrenforth Dyrenforth & Lee and Mr. Philip C. Dyrenforth, solicitors and of counsel for appellants.

Service of the above notice, with copies of motion and petition herein referred to, accepted this 18th day of February, 1902.

DYRENFORTH, DYRENFORTH & LEE.
PHILIP C. DYRENFORTH.

Endorsed: Filed February 20, 1902. Edward M. Holloway, clerk.

And afterwards on the same day, to wit: on the twentieth day of February, 1902, in the October term last aforesaid, came the appellee by his counsel, Mr. Frank T. Brown and Mr. Samuel E. Darby,

and filed in the office of the clerk of this court his petition for appeal to the Supreme Court of the United States, which petition for appeal is in the words and figures following, to wit:

332 *Petition for Appeal.*

In the United States Circuit Court of Appeals for the Seventh Circuit, January Term, 1902.

THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, FRANK S. HERETH, and O. T. EASTMAN, Appellants,
vs.
WILLIAM R. WARNER, JR., Appellee.
} In Chancery. No. 766.

Appeal of the appellee.

William R. Warner, Jr., the appellee in the above-entitled cause, considering himself aggrieved by the judgment and order entered herein on the 21st day of January, 1902, and as amended on the 14th day of February, 1902, hereby appeals from said judgment and order and the whole thereof, to the Supreme Court of the United States.

FRANK T. BROWN,
SAMUEL E. DARBY,
Solicitors and of Counsel for Appellee.

Chicago, Ill., Feb. 18, 1902.

This appeal is formally allowed March 7, 1902, bond for $500.

JAS. G. JENKINS,
Presiding Judge U. S. Circuit Court of Appeals, Seventh Circuit.

Endorsed: Filed Feb. 20, 1902. Edward M. Holloway, clerk.

333 And afterwards, on the same day, to wit: on the twentieth day of February, 1902, in the October term last aforesaid, the following further proceedings were had and entered of record to wit:

THURSDAY, *February* 20, 1902.

Court met pursuant to adjournment.
Present: Hon. James G. Jenkins, circuit judge, presiding; Hon. Peter S. Grosscup, circuit judge; Hon. Francis E. Baker, circuit judge; Hon. William H. Seaman, district judge.

Before Hon. Peter S. Grosscup, circuit judge; Hon. Francis E. Baker, circuit judge; Hon. William H. Seaman, district judge.

THE SEARLE & HERETH COMPANY ET AL.
vs.
WILLIAM R. WARNER, JR., as Executor of the Estate of William R. Warner, Deceased, and William R. Warner, Jr. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

On application of counsel for appellee, it is ordered that mandate in this cause be, and the same is hereby stayed until Tuesday, February 25, 1902.

And afterwards, to wit: on the twenty-fifth day of February, 1902, in the October term last aforesaid, came the appellee, by his counsel, Mr. Frank T. Brown and Mr. Samuel E. Darby, and filed in the office of the clerk of this court his assignment of
334 errors, which assignment of errors is in the words and figures following, to wit:

United States Circuit Court of Appeals for the Seventh Circuit.

THE SEARLE & HERETH COMPANY, GIDEON D. SEARLE, FRANK S. HERETH, and O. T. EASTMAN, Appellants,
vs.
WILLIAM R. WARNER, JR., Appellee. } In Equity. No. 766.

Assignment of Errors.

And now comes William R. Warner, Jr., appellee in the above-entitled case, by Frank T. Brown and Samuel E. Darby, his solicitors and counsel, and says that in the record of the proceedings in the above-entitled cause there is manifest error in this, to wit:

1. The United States circuit court of appeals for the seventh circuit erred in ordering the circuit court to dismiss the bill of complaint in this cause.

2. The United States circuit court of appeals for the seventh circuit erred in holding that the trade-mark "Pancreopepsin" was not a good and valid trade-mark under the statute.

3. The United States circuit court of appeals for the seventh circuit erred in holding that the appellee did not have a common-law right to the name or trade-mark "Pancreopepsine."

4. The United States circuit court of appeals for the seventh circuit erred in holding that the trade-mark "Pancreopepsine" was not in fact a trade-mark on account of being descriptive of
335 the ingredients composing the remedy to which the name was applied.

5. The United States circuit court of appeals for the seventh circuit erred in holding that the rights of appellee in and to the trade-

mark "Pancreopepsine" were not violated and infringed by the use of the trade-mark "Panero-Pepsin" by appellants.

6. The United States circuit court of appeals for the seventh circuit erred in holding that there was no proof in the record establishing unfair competition in trade.

7. The United States circuit court of appeals for the seventh circuit erred in holding, in the presence of the record before it, that the artificial and coined word "Pancreopepsine," originated by appellee, did not justify appellee, under the right of the doctrine of unfair competition, to enjoin the appropriation of the word "Panero-Pepsin," by appellants.

By BROWN & DARBY,
FRANK T. BROWN,
SAMUEL E. DARBY,
Solicitors and of Counsel for Appellee.

Chicago, Ill., Feb. 25, 1902.

Endorsed: Filed Feb. 25, 1902. Edward M. Holloway, clerk.

And afterwards, on the same day, to wit: on the twenty-fifth day of February, 1902, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

336 TUESDAY, *February* 25, 1902.

Court met pursuant to adjournment.

Present: Hon. James G. Jenkins, circuit judge presiding; Hon. Peter S. Grosscup, circuit judge; Hon. Francis E. Baker, circuit judge.

THE SEARLE & HERETH COMPANY ET AL.
vs. } 766.
WILLIAM R. WARNER, JR., Executor, etc., *et al.*

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

It is ordered by the court that the appellee in this cause may have until Wednesday, February 26, 1902, to file his brief in support of the motion for a stay of mandate, and that the appellants may have until Thursday, February 27, 1902, to file their brief in reply thereto.

And afterwards, to wit: on the twenty-eighth day of February, 1902, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

FRIDAY, *February* 28, 1902.

Court met pursuant to adjournment.

Before Hon. James G. Jenkins, circuit judge; Hon. Peter S. Grosscup, circuit judge; Hon. Francis E. Baker, circuit judge.

337 THE SEARLE & HERETH COMPANY ET AL.
vs.
WILLIAM R. WARNER, JR., ETC., ET AL. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Now again this cause comes on to be considered on the motion for an order staying the issuance of the mandate during the pendency of the appeal to the United States Supreme Court, and on consideration thereof, it is now ordered that the motion be, and the same is hereby overruled.

And afterwards, to wit: on the seventh day of March, 1902, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

FRIDAY, *March* 7, 1902.

Before Hon. James G. Jenkins, presiding judge.

THE SEARLE & HERETH COMPANY ET AL.
vs.
WILLIAM R. WARNER, JR., ET AL. } 766.

Appeal from the circuit court of the United States for the northern district of Illinois, northern division.

Now this day comes Mr. Frank T. Brown, counsel for appellee, and presents a petition for appeal to the Supreme Court of the United States, and moves the court for an order allowing an appeal, and on consideration thereof, it is ordered that the said ap-
338 peal be and the same is hereby formally allowed on the condition of the filing of an appeal bond in the sum of five hundred dollars, said bond to be approved by the court.

And afterwards, to wit: on the twenty-sixth day of March, 1902, in the October term last aforesaid, came the appellee, by his counsel Mr. Frank T. Brown and Mr. Samuel E. Darby, and filed in the office of the clerk of this court his bond on appeal, which bond is in the words and figures following, to wit:

Know all men by these presents, that we, Wm. R. Warner, Jr., executor of the estate of Wm. R. Warner, deceased, as principal, and The City Trust Safe Deposit & Surety Co. of Philadelphia, as sureties, are held and firmly bound unto The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman in the full and just sum of five hundred dollars ($500.00) to be paid

to the said The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, their certain attorney, executors, administrators, or assigns; to which payment well and truly to be made, we bind ourselves, our heirs, executors, and administrators, jointly and severally, by these presents.

Sealed with our seals and dated this 22nd day of March, in the year of our Lord nineteen hundred and two.

Whereas, lately at a hearing of the United States circuit court of appeals for the 7th circuit in a suit depending in said court,
339 between Wm. R. Warner, Jr., executor, estate of Wm. R. Warner, deceased, appellee, and The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth, and O. T. Eastman, appellants, a decision was rendered against the said Wm. R. Warner, Jr., and the said Wm. R. Warner, Jr., having obtained leave to file an appeal and having filed a copy thereof in the clerk's office of the Supreme Court and the U. S. court of appeals to reverse the decision in the aforesaid suit, and a citation directed to the said The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, citing and admonishing them and each of them to be and appear at the Supreme Court of the United States to be holden at Washington on the — day of ——, 189–.

Now, the condition of the above obligation is such, that if the said William R. Warner, Jr., shall prosecute his appeal to effect, and answer all damages and costs if he fail to make his plea good, then the above obligation to be void; else to remain in full force and virtue.

WILLIAM R. WARNER, JR., [SEAL.]
Executor Est. William R. Warner, Deceased.
THE CITY TRUST, SAFE DEPOSIT, AND SURETY COMPANY OF PHILADELPHIA,
By JOSEPH T. BOWEN,
Resident Vice-President.

Attest: LOUIS L. DENT,
Resident Assistant Secretary.

Sealed and delivered in presence of—
CATHERINE C. O'NEILL.

Surety satisfactory.
P. C. DYRENFORTH.

Approved by—
JAS. G. JENKINS,
Presiding Judge, U. S. Circuit Court of Appeals, Seventh Circuit.

Endorsed: Filed Mar. 26, 1902. Edward M. Holloway, clerk.

340 United States Circuit Court of Appeals for the Seventh Circuit.

I, Edward M. Holloway, clerk of the United States circuit court of appeals for the seventh circuit, do hereby certify that the foregoing printed and typewritten pages, numbered from 1 to 339, inclusive, contain a true copy of the transcript of the record and proceedings (excepting briefs of counsel), in the United States circuit court of appeals for the seventh circuit, in the case of The Searle & Hereth Company, Gideon D. Searle, Frank S. Hereth and O. T. Eastman, *vs.* William R. Warner, Jr., executor of the estate of William R. Warner, deceased, No. 766, October term, 1901, as the same remains upon the files and records of the United States circuit court of appeals for the seventh circuit.

Seal United States Circuit Court of Appeals, Seventh Circuit.

In testimony whereof I hereunto subscribe my name and affix the seal of said United States circuit court of appeals for the seventh circuit, at the city of Chicago, this twenty-sixth day of March, A. D. 1902.

EDWARD M. HOLLOWAY,
Clerk of the United States Circuit Court of Appeals for the Seventh Circuit.

Endorsed on cover: File No. 18,499. U. S. C. C. of appeals, 7th circuit. Term No. 307. William R. Warner, Jr., executor of the estate of William R. Warner, deceased, appellant, *vs.* The Searle and Hereth Company, Gideon D. Searle, Frank S. Hereth, and O. T. Eastman. Filed April 16th, 1902.